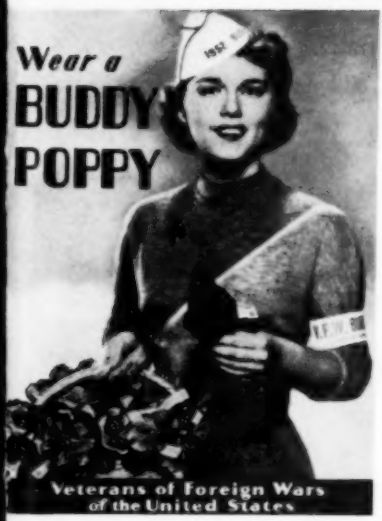
MAY, 1952

Industrial FINISHING

Published Monthly in the Interest of Product Cleaning and Painting by Practical Publications, Inc., 1142 N. Meridian Street, Indianapolis 4, Ind.



The 1952 Poppy Girl is Miss Ginger Crowley, 18 year old film actress, a daughter of Commander Dennis Stafford Crowley, U. S. Fleet, Retired.

HELP HER MAKE POPPY DAY A SUCCESS . . .

Each year the V. F. W. selects a Buddy Poppy girl to symbolize the thousands of women and girls—wives and mothers, daughters and sisters of our country's veterans—who distribute millions of Poppys during the week prior to Memorial Day.

"I know what the annual Buddy Poppy sale means to our country's disabled and needy veterans", said Miss Crowley, commenting on her selection, "and I am sure every patriotic American who has the opportunity to help, will do so generously. To be chosen as the Buddy Poppy Girl is an obligation as well as an honor, and I intend to do everything I can to help make the sale a success."

Buy a Buddy Poppy—every cent will be used for the benefit of those who fought for you, and who are now in need of your help.

Likewise the Lilly Key symbolizes our slogan, "With the Right Finish — You'll Finish Right". Help yourself to a successful finish by always using the Lilly Key.

THE Lilly FINISHES

VARNISH COMPANY

Indianapolis, Indiana • Gardner, Mass.

THE LILLY COMPANY • High Point, N. C.

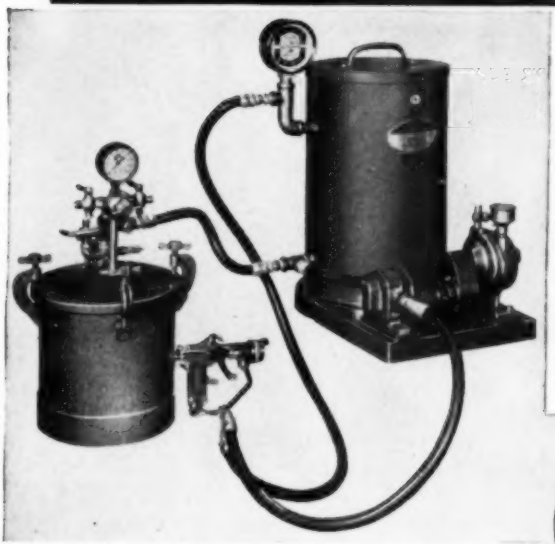
TO GIVE YOUR PRODUCT A GOOD START, GIVE IT AN INTERCHEMICAL FINISH!

Undercoats . . . Varnishes . . . Lacquers . . .
Enamels for Metal . . . Plastic . . . Wood

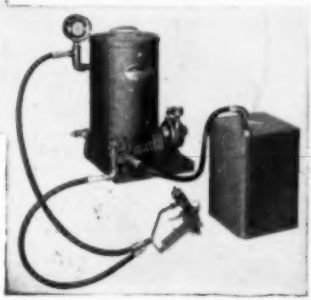
AULT & WIBORG, MURPHY, ROXALIN, AND IC ARE TRADEMARKS OF INTERCHEMICAL CORPORATION

IN CANADA, SIMILAR PRODUCTS ARE MADE AND SOLD BY AULCRAFT PAINTS LIMITED, TORONTO, UNDER THE TRADE NAME "AULCRAFT PAINTS".

IT'S EASY TO PUT HOT SPRAY INTO YOUR PLANT —



WITH BEDE PAINT HEATERS



HIGHLY VERSATILE — Can be used with pressure tank, or draw material direct from container.

IT'S PROFITABLE, TOO! You get better finishes faster — saving time, waste of material and loss from rejects.

BEDE Paint Heaters are compact and fit into small areas. Installation requires only electric and air connections. Adjustable thermostat provides positive control of paint temperature and viscosity. Patented aluminum heat transfer eliminates troublesome liquids. Completely safe, U-L Approved. Trouble-free — little maintenance required. Proved by over 2,000 installations in top industrial plants. Recommended by leading paint manufacturers.

WRITE TODAY FOR ILLUSTRATED BOOKLETS

BEDE INDUSTRIAL PRODUCTS Inc.

Industrial Finishing Equipment

1110-B BROOKPARK ROAD • CLEVELAND 9, OHIO

CHEM-VEER PROVES TOUGH ENOUGH FOR HAMILTON'S EXACTING NEEDS

This furniture by the Hamilton Manufacturing Co. is highly specialized in design and application. Its use requires a finish tough enough to withstand the damaging reaction of spilled alcohol and medicines found in the doctor's office. From experience, Hamilton has found that our Chem-Veer sealer and Chem-Veer flat varnish provides a protective coating that is easy to apply and stays beautiful in hardest use. Our studio specialists created Chem-Veer for just such exacting jobs. In the same way, they custom-create thousands of individual formulas each year to answer the finishing problems of our customers profitably.

The Better the Finish, the Better the Buy

GRAND RAPIDS VARNISH CORPORATION

GRAND RAPIDS, MICHIGAN

Makers of the Famous Guardsman Finish and Guardsman Cleaning Polish

MAY, 1952
Vol. XXVIII, No. 7

CCA

A monthly magazine for finishing room and paint shop foremen, production superintendents, chemists, purchasing agents and company executives of industrial plants where product surface cleaning and finishing are major operations in the manufacture of parts and products.

Industrial FINISHING

W. H. ROHR, Editor P. C. BARDIN, Associate Editor

Contents

Random Comment on the Industrial Scene 4
Small Parts Finishing System 24
Hammer Finish for New Power Lawn Mowers 30
Painting the Hay Baler 39
Broom Handles Gasket Dipped Mechanically 46
Fluorescent Lighting Fixtures 57
How to Get More out of Spray Guns 62
Let's Cut Your Cost of Patching 72
Letters from Readers 86
Questions and Answers 96
Materials; Supplies; Equipment 108
Booklets; Circulars; Catalogs 122
Editorial 126
Classified Advertising 134
Advertisers Index 136

Bede Distributor Appointed for New York City 27
Rebuilt Exchange Program Introduced by DeVilbiss 36
Metals Disintegrating Appoints Hoffman Co. in Indianapolis 36
A Reader's Comment on Hammer Finish Article 50
Iriditp Line at Finishing Show 60
Binks Opens New Branch in Dallas, Texas 66
New Mearl Corp. Lab. at Peekskill, N. Y. 70
European Survey Trip Planned by G. R. Varn. Corp. 70
Goldstein Advanced by Midland Industrial Finishes Co. 70
Hogarth Represents Michigan Oven Co. in Philadelphia 74
Use Tack Rags Wiping Off Dust 76
Multiple Deck Racks for Drums 80
To Work on Silicone-Polished Finish 82
Managers of Laboratories for Standard-Toch Chemicals 82
Industial Finishing Exposition 106
E. D. Griffin Retires as V.P. of P.P.G. Paint Divn. 106
Ross Engineering Corp. Opens New Plant No. 3 106
Henry Kidd V.P. of DeVilbiss Spray Painting Equip. Divn. 106
Forest Products Research Soc. 1952 National Meeting 118
J. A. Sanches Made Bede's N. Y. Dist. Sales Mgr. 132

Acceptance under Section 34.64, P. L. & R., authorized

Published
the 18th of each month by
PRACTICAL PUBLICATIONS
Incorporated
1142 N. Meridian St.
Indianapolis 4, Ind.
Telephone PLaza 4771

President.....W. H. Rohr
Vice-President.....E. A. Dosch
Sec.-Treas.....R. E. Sults

★

Eastern Representative:
C. A. LARSON
254 West 31st St.
New York 1, N. Y.
Phone: Longacre 4-4285
4-4286

West Coast Representatives:
SIMPSON-REILLY LTD.
Halliburton Building,
Los Angeles 17, Calif.
Telephone: Dunkirk 8-1179
814 Central Tower
San Francisco 3, Calif.
Telephone: Douglas 2-4994

★

Subscription Rates Per Year
U. S. and Possessions.....$3.00
Canada and Foreign Countries $5.00

28 TWENTY-EIGHTH YEAR OF PUBLICATION

Magnetic Probe, made of super-magnetic alloy, is no larger than a fountain pen. Point of magnet can be extended or retracted from a case by turning end-knob. Strength of magnet can be controlled by amount of extension. Pocket clip is provided for safe, easy carrying.

It's a magnet, adjustable for strength.

Assemblers and inspectors find the Probe useful to test coat of surfaces for magnetic properties of the under-material.

Plant first aid stations use the Probe to remove steel splinters from the eyes or skin of employees . . .

* * *

Rust-Guarded. A new electronic development that makes possible a more accurate means of safeguarding packaged military equipment from rust and corrosion during long storage periods is announced by Minneapolis-Honeywell Regulator Co.

The device is a small relative humidity indicator that is sealed inside of vapor-proof containers with stored equipment and acts as a "sentinel" to warn of excessive humidity. It was developed in co-operation with the Department of Defense and tested under direction of the Ordnance Corps.

The moisture content of the sealed package at any given time can be determined easily and quickly by plugging a small specially designed portable electron meter into an outside connection, and reading directly from it.

* * *

Waterproof Packing and caulking material is announced. It is a glass fiber material, said to be dust free, and is resistant to water and temperatures up to 500° F. This material has excellent insulating qualities.

* * *

"Push Button" Factories. Recently it was predicted that factories in the foreseeable future would have more push button controlled, automatic equipment and fewer workers.

With all of this mechanization, it is said, there will be no large scale unemployment problem due to the prospective population increase, coupled with the demand for an even higher standard of living. Without automatic equipment for complete production, human workers could not produce all of the goods needed.

Many products will have to be redesigned for full automatic produc-

TINTONE

From the Start Consider the Finish

For the clearest—richest most beautiful FINISH consider starting with DOLAN'S newest development in

WOOD FILLER

TINTONE

FILLER is the foundation for a perfect FINISH.

TINTONE provides a clear, clean transparent color, free from spotting, greying or hazing. It wipes easily—fills perfectly—reduces puffing and shrinking.

Final rubbing is minimized because of the smooth level surface provided by **TINTONE FILLER.**

Available in all shades of mahogany, Walnut and Blonde FINISH.

V. J. DOLAN & COMPANY, INC.

"Unquestionable Quality"

INDUSTRIAL FINISHES

1830 N. Laramie Avenue Chicago 39, Illinois

BErkshire 7-0100

A helping hand...
• on Metal Cleaning • Electrolytic Cleaning
• Spray Booth Maintenance
There's valuable assistance "on call" for you . . . from your Du Bois representative. He's a technician who has the knowledge, the experience, and the right compounds for every type of metal cleaning and for spray booth maintenance. Back of him is the Du Bois Company, with years of experience in successfully solving problems like your own.
Du Bois Engineered Service is day in, day-out help—with three essentials: (1) thorough analysis of your operations by trained and experienced personnel, (2) installation of prescribed specialized compounds and (3) continuing inspection and service to keep your operations at peak efficiency and lowest possible cost.
For a comprehensive, no-obligation survey and analysis of metal cleaning or spray booth maintenance in your own plant, write today.
The Du Bois Company
Cincinnati, Ohio
Los Angeles, Calif.

tion. Others will have to be made from different materials than we are accustomed to using. We will have to become more receptive to new ideas, and modify our thinking to be successful in this ultra mechanical age.

* * *

Light Switch Delay. It is called the Edco delayed action light switch, and looks like an ordinary switch except when it is snapped to the off position labeled "delay," the light or lights it controls stays on for a full minute. This is long enough to permit a person to walk about 75 feet before the light goes out. It is said to have Underwriters Laboratories, Inc. approval.

* * *

Ceiling Fans (vertical, propellor type, for ventilation), are announced by the Herman Nelson Division of American Air Filter Co., Inc., Moline, Illinois.

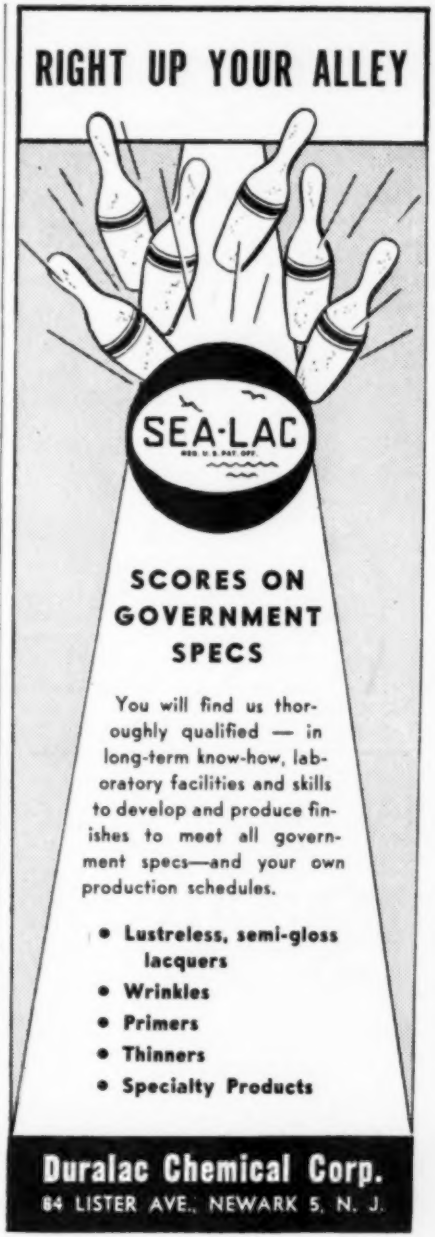
* * *

Chemical Safety Jugs made of polyethylene (plastic) are offered by American Agile Corp., P. O. Box 168, Bedford, Ohio. They are primarily designed for the moving and handling of smaller quantities of corrosive chemicals in various industrial operations. They may be dropped or suffer rough usage without cracking or breaking.

* * *

Non-Glare Glass. For the first time, the functional characteristics of Solex, heat-absorbing, glare-reducing plate glass, introduced by Pittsburgh Plate Glass Co. last December, have been successfully imparted to a flat drawn sheet glass.

To be known as Pennvernon Solex, the new greenish tint heavy flat drawn glass product possesses approximately the same heat and glare-reducing properties as the ¼-inch


RIGHT UP YOUR ALLEY
SEA-LAC
SCORES ON GOVERNMENT SPECS
You will find us thoroughly qualified — in long-term know-how, laboratory facilities and skills to develop and produce finishes to meet all government specs—and your own production schedules.
• Lustreless, semi-gloss lacquers
• Wrinkles
• Primers
• Thinners
• Specialty Products
Duralac Chemical Corp.
64 LISTER AVE., NEWARK 5, N. J.

ARE YOUR THINNER COSTS TOO HIGH?

How To Save Money Safely On Thinners

We make nothing but **thinners**—For 27 years we have been saving money for big and little customers. They like us because we make the thinner they want at a **money-saving price!**

Let us show you how a Lacquer Thinner **SPECIALIST** can supply you with the **right** Thinner . . . and still save you money.

Just fill out form below and mail today. We'll work out a Thinner *especially for you*, and send a sample. Think we can do it for 85¢ or less a gallon too!

POTTER PAINT CO., INC.
CORTLAND 1, N. Y.
THINNER SPECIALISTS

The product we make is:_____
We use Lacquer Thinner for:
☐ Spray ☐ Dip ☐ Cleaning ☐ Other_____
We use Lacquer Thinner on:
☐ Metal ☐ Wood ☐ Other_____
We want it to dry:
☐ Fast ☐ Slow ☐ Medium

Name_____
Address_____
City_____ Zone____ State_____

Solex plate glass product. It will be made immediately available in cut sizes not to exceed 15 square feet. Pennvernon Solex will be manufactured in only one thickness, 7/32-inch.

* * *

Color Matching. Colored vinyl plastic materials are matched accurately to customers' samples here under controlled lighting conditions. The color matching booth, which eliminates dependence on natural light, produces both high noon and horizon light to determine differences in shades and overtones of colored material. Auburn Button Works, Auburn, N. Y., uses the booth to match colors during production runs on vinyl products.

* * *

Toy Electric Trains. The Lionel Corp., world's largest manufacturer of toy electric trains, announces that orders received for trains in 1952 are the largest in the company's history. The volume of orders booked as of the annual Toy Fair ended March 21, substantially exceeded the company's

(Continued on page 132)

Whatever it is IF IT'S MADE OF *Metal*

you'll FINISH it

• FASTER • CHEAPER • BETTER

with a Schmieg planned CENTRI MERGE FINISHING SYSTEM

FINISHING has a highly important bearing on the sale of your product if APPEARANCE is a factor in its acceptance. Obsolete, inadequate finishing equipment improperly laid out, not only makes for inefficient finishing and consequent poor appearance—it materially adds to manufacturing cost.

Equipment for metal washing, rustproofing, dry-off, spray painting, baking, as developed by Schmieg engineers, is planned precisely for your plant and product—coordinated into a speedy, smooth-flowing production unit that saves time—space—and operating expense. Schmieg has the years of engineering experience, knowledge of modern methods and the facilities for seeing the job through—from initial designs to completed machines, set up and ready to operate in your plant.

Our engineers will be pleased to consult with you in the solution of your problem.

THE best AIR PURGE is CENTRI MERGE

Schmieg INDUSTRIES INC.

Engineers & Manufacturers

312 PALMETTE AVENUE • DETROIT 2, MICHIGAN

FIELD REPORTS PROVE IT!

NEW "61"

SERRATED RUBBER

CONTACT WHEEL

can double the productive life of your abrasive belts

REPORT NO. 4627

ACCOUNT:	A midwest hand-tool manufacturer.
EQUIPMENT:	"61" contact wheel, 16" x 3". Belt: 100 & 180 grit, industrial cloth, 148" x 3".
OPERATION:	Finishing small forged steel wrenches.
RESULTS:	Plain contact wheel gave them 1000 wrenches per belt. Now getting 2000 wrenches per belt with "61" contact wheel. Belts used to glaze but "61" wheel cuts out all glazing and belt cuts much faster.

Those special serrations you see in the face of the "61" contact wheel cause a controlled breakdown in the bond of the abrasive belt. Glazing is practically eliminated —belt life is amazingly lengthened. Output per belt and per day is way up—finishing costs are cut to rock bottom. Get the whole "61" story now, from your CARBORUNDUM or distributor salesman—or write Dept. IF 82-64.

Only CARBORUNDUM

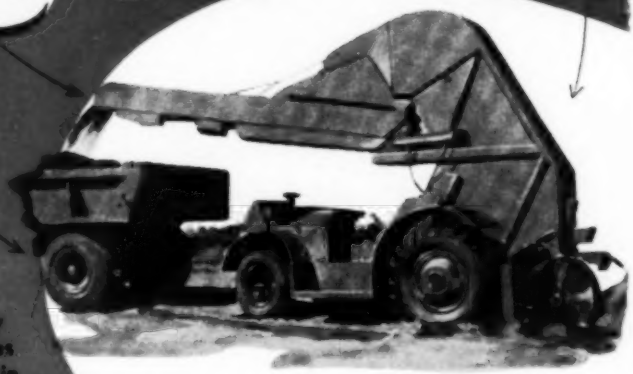
TRADE MARK

offers ALL abrasive products ...to give you the proper ONE

"Carborundum" is a registered trademark of The Carborundum Company, Niagara Falls, New York

M-64R

Protection by TOUSEY!



HEAVY duty loader cranes cost less to maintain and give extra years of service when properly protected by a good exterior finish. Such a finish is made by TOUSEY and successfully used by manufacturers of this equipment. ★TOUSEY'S strict policing of raw materials and rigid standards of production offers another protection to its many customers . . . the protection of Quality in its finished products.

TOUSEY PRODUCTS

DURACOTE for DURABILITY

THE TOUSEY VARNISH COMPANY

[illegible] WEST [illegible] STREET . CHICAGO [illegible] ILLINOIS

WHAT NO SPRAY BOOTH?

That's right, with the RANSBURG NO. 2 PROCESS, there's no overspray to be exhausted . . . ventilation of solvent vapor is all that is necessary.

● Spray painting is no longer a hit or miss proposition. With the Ransburg No. 2 Process, it's a science.

Because the coating material is electrostatically atomized (no compressed air used) and electrostatically deposited, costly overspray is eliminated with the No. 2 Process.

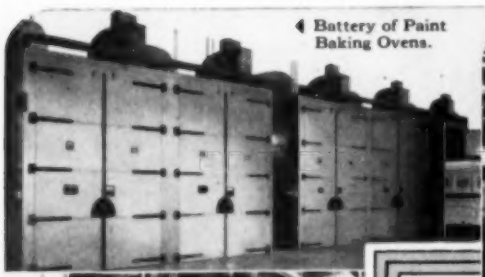
In most installations, efficiency is in the high nineties, and in some instances, efficiency exceeds 99%. On most production lines, the No. 2 Process will produce 25% to 75% more pieces per gallon than any other spray finishing system. Efficiency is even greater when compared to conventional hand spray methods.

We will welcome the opportunity of telling you more about the Ransburg No. 2 Process, and what it can do for you in your own finishing department. Write or call.

RANSBURG ELECTRO-COATING CORP.

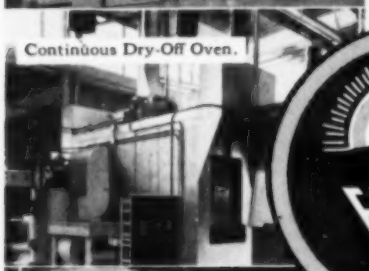
Indianapolis 7, Indiana

RANSBURG



◀ Battery of Paint Baking Ovens.

A-Type Continuous Paint Baking Oven.



Continuous Dry-Off Oven.

LANLY

FINISHING OVENS

THE LANLY COMPANY • 760 PROSPECT AVE

CLEVELAND, OHIO

Continuous Monorail Oven with Air Seals.

LANLY Specialized engineers are daily consulting with progressive manufacturers and meeting the need for high grade, uniform, finishing oven production at satisfactory volumes.

Continued repeat orders vouch for **LANLY** competence.

Complete information and literature supplied upon request.

◀ Batch-Type Oven.

Lay-Down Porcelain Enamel Dryer. ▶

Multiple-pass Finishing Oven.

NIKOLAS

SINCE 1890

IT'S A FACT

The finest lighting fixtures manufactured by the Lighting and Lamp Industry are finished with Nikolas Quality Finishes.

Whether the requirements be for lacquers or synthetics; air drying or baking, in clear, transparent colors or enamels, Nikolas Finishes for over 55 years have been accepted as the most economical to use, yet producing the finest most durable films available.

Rejects because of finishing material failure cost money —and customers.

Eye Appeal Sells Your Product!

FOR INFORMATION, SAMPLES AND RECOMMENDATIONS
WRITE—WIRE—OR CALL

G. J. NIKOLAS & CO., INC.

2850 WASHINGTON BLVD., BELLWOOD, ILL. • 33 GRAND ST., BROOKLYN 11, N. Y.

3 way help

on all finishing problems

1 Technical help on FINISHING METHODS

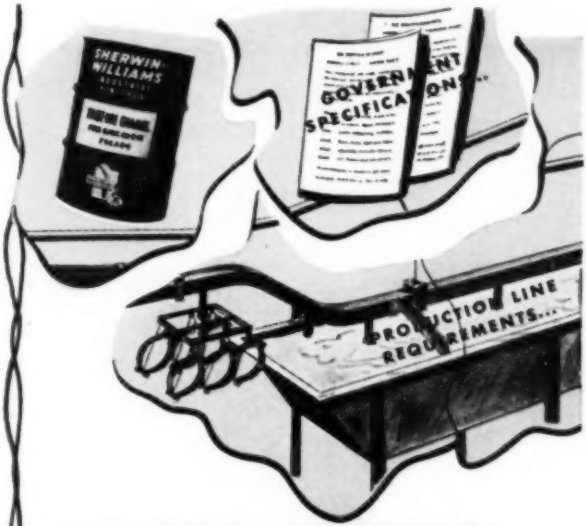
Do you spray, dip, flow-coat or all three? Sherwin-Williams' wide background of experience in all types of production finishing methods—including electrostatic, automatic and hot spray—may help you solve production problems, whether defense or civilian.

2 Specialized help on FINISHING MATERIALS

Sherwin-Williams Industrial Production Line Finishes include a complete line of primers, reducers and finish coats for air drying and baking, for wood and metal, especially designed to meet civilian production-line requirements.

3 Industry-wide experience on FINISHING DEVELOPMENTS

Sherwin-Williams' broad experience in finishes and finishing systems for all types of products provides every industry the benefit of improvements in materials and techniques developed in other specialized fields.



DEFENSE FINISHES *must fit* BOTH!

Producing finishes that fit government specifications for defense products is only half the job. Unless they fit the practical needs of finishing line operation, too, they can impose undue restrictions on output, efficiency, or both.

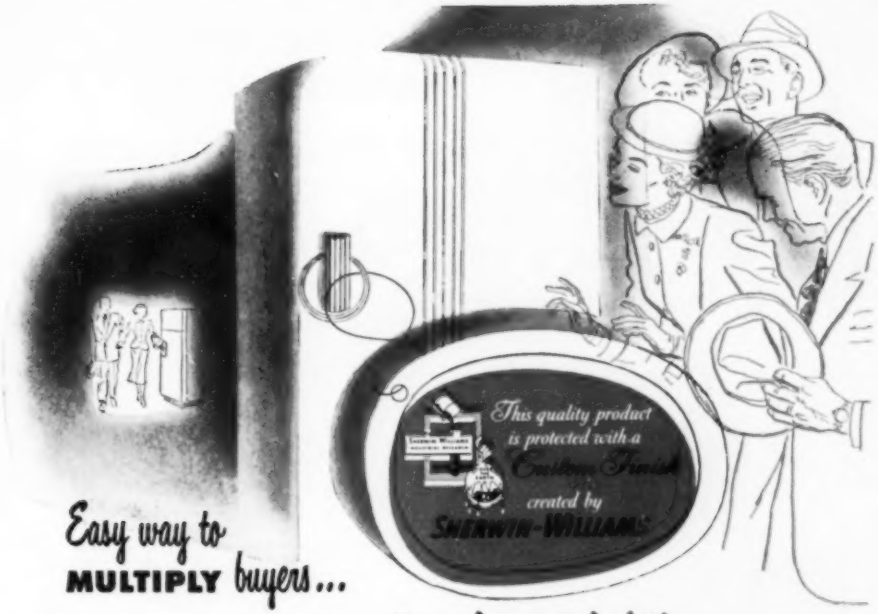
Sherwin-Williams experience, extending through both World Wars, together with technical service facilities extending from coast to coast, provides the broadest possible background for meeting *both* requirements in the production of specification finishes.

If you have a problem of adapting or devoting any portion of your production to defense contracts involving the use of finishes, your Sherwin-Williams Industrial Finishes Specialist can offer you valuable help. Call on him today, or write The Sherwin-Williams Co., General Industrial Division, Cleveland 1, Ohio. Industrial Zone Offices located in Philadelphia, Pa., Newark, N. J., Chicago, Ill., Cleveland, Ohio, Grand Rapids, Mich., Atlanta, Ga., Dallas, Texas, and Oakland, Calif.

SHERWIN-WILLIAMS

INDUSTRIAL FINISHES

for defense production . . . for civilian production



Easy way to MULTIPLY buyers...

KEMGLAD®—THE "WHITE-FOR-LIFE" APPLIANCE FINISH
Food acids . . . spattered grease . . . even household chemicals won't mar the lasting beauty of these widely used Sherwin-Williams Appliance Finishes! Investigate what these advanced technical developments in synthetic resin finishes for appliances and metal products can offer you. Call, wire or write.

ADD the sales appeal of the BEST-KNOWN NAME IN FINISHES!

ONE good name deserves ANOTHER!

The Sherwin-Williams name, identifying the quality finish on a quality product, contributes the added sales appeal of the best-known name in finishes . . . a trade-mark known round the world as a symbol of good finishes!

That's why market-minded appliance manufacturers, more and more, are looking to Sherwin-Williams Custom Finishes to meet their requirements . . . and to provide an added sales advantage with tags identifying the finish on the completed product.

Ask your Sherwin-Williams Industrial Representative for details about the identification aids available to users of Sherwin-Williams materials, and the sales advantages they offer—or write The Sherwin-Williams Co., General Industrial Division, Cleveland 1, Ohio.

SHERWIN-WILLIAMS

INDUSTRIAL FINISHES

It's the old **ONE-TWO** *for* **GRINDING DUSTS** *with this . . .*

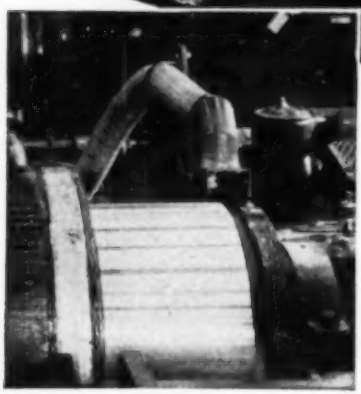
TORIT

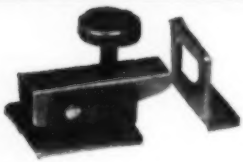
DUST COLLECTOR

Poke him off balance with your left, then let him have it with your right. That's good boxing and, in the setup pictured here, good dust collecting.

On this commutator grinder a problem of turbulence and heavy dusts was solved with a Torit No. 84 Dust Collector and dual hooding. Here the lower hood sort of pokes the dust off balance so it's a sucker for the one on top . . . and dust no longer prevents accurate turning of the commutator.

Torit has been solving dust problems like this for forty years. Our experience and know how are at your command . . . so bring *your* dust problems to—



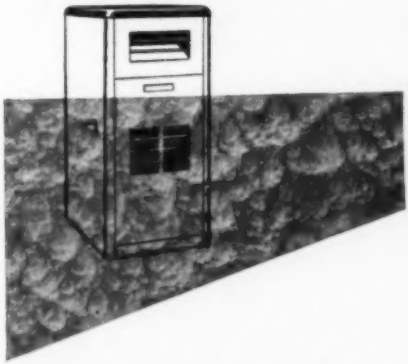


Torit Door Fastener

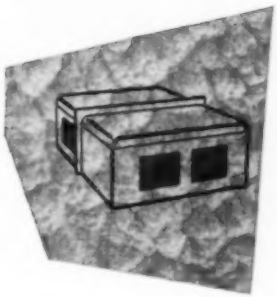
The sturdy and efficient door fastener used on Torit cabinets is available for use on your own products. Strike plate either flat or angular. Write for quantity prices.

TORIT MANUFACTURING CO.
300 Walnut Street St. Paul 2, Minn.

P.S. Also ask for the latest Torit catalog showing the complete Torit line of dust collecting equipment.



Hammerloid®



- ★ SMOOTH, TEXTURED FINISH
- ★ METALLIC, HAMMERED METAL EFFECT
- ★ COLORFUL AND ATTRACTIVE
- ★ HIDES METAL IMPERFECTIONS
- ★ ECONOMICAL IN PRODUCTION
- ★ AVAILABLE IN ONE OR TWO COAT TYPES

Few coatings have Hammerloid's versatility in satisfying varying production and sales requirements for a wide range of metal products. For further information, contact

THE GLIDDEN COMPANY

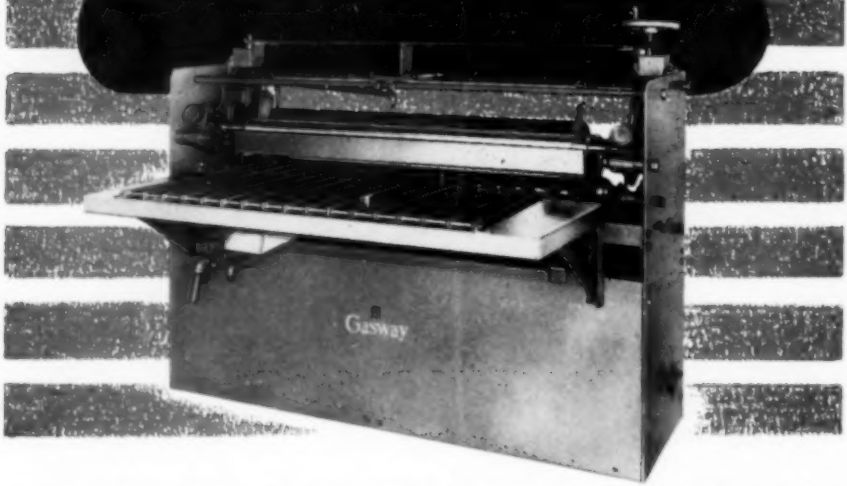
Dept. K-552 • 11001 Madison Avenue, Cleveland 2, Ohio

Glidden

Glidden Product Finishes

PAINTS • LACQUERS • ENAMELS • VARNISHES • PRIMERS AND SPECIAL-PURPOSE FINISHES

Rollacoat for economy
GET FINER—FASTER FINISHING!



The benefits to be gained by using the Rollacoat method of applying finishes and protective coatings, to practically any type of flat materials, are three-fold. In the first place coating speeds are greatly increased over those of any other method and are governed largely by how fast the coated materials can be handled or dried. Secondly, the coverage per sq. ft. per gallon is usually at least 50% greater, the only loss being the paint removed from the rolls at the end of a run. In the third place you obtain finer quality of finish due to accurate control of thickness and eveness of coat.

The applications of Rollacoating are numerous. Top, bottom and sides of practically any type of flat material, whether sheet or coil stock, can be coated by a single pass through the machine.

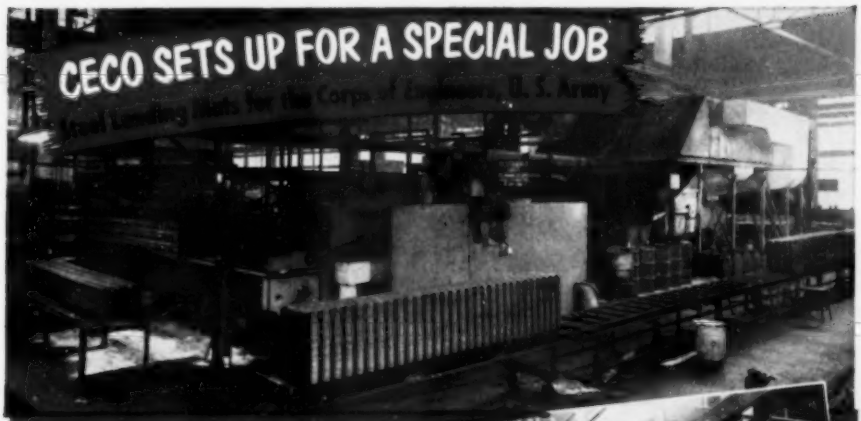
Special equipment for cleaning, treating, coating, drying, and rewinding strip in continuous process can be constructed to special order.

GASWAY CORPORATION

Write or wire today for the 12 page Gasway illustrated book describing Rollacoat Finishers, their possibilities and limitation.

6463 N. Ravenswood Ave.
Chicago 26, Illinois

Visit us in Booth 3G at the Industrial Finishing Exposition



CLEANED, DIPPED
FINISH BAKED
by this

DESPATCH

Continuous Conveyor
FINISHING SYSTEM

To meet a stepped-up production schedule for Uncle Sam, the Ceco Steel Products Corporation of Chicago, installed this DESPATCH Finishing System used for cleaning, painting and finish baking of airplane landing mats.

The system comprises a gas heated, 2-stage, dip cleaning unit with alkali wash and hot water rinse, a paint dip tank and single pass finish bake oven of bottom entry, "A" type design. The oven is gas-fired and operates at a maximum temperature of 350°F. Material is suspended from cross rods on a continuous conveyor, which returns to the loading zone over the top of the oven.

Fifty Years' Experience

DESPATCH CAN HELP YOU BOOST PRODUCTION

Through 50 years of continuous research and on-the-job experience Despatch engineers have been accumulating facts and figures on how to give you better, higher producing finishing systems. Today, you benefit by these years of experience when you call on Despatch to help you. Despatch engineers will gladly analyze your requirements . . . will plan, select, coordinate and install complete Finishing Systems or individual units.

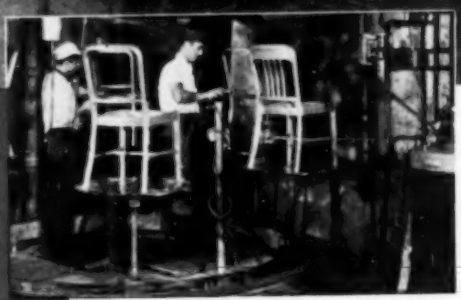
WRITE OR WIRE TODAY TO DEPT. E.

FIFTIETH ANNIVERSARY
DESPATCH
OVEN COMPANY

World's Largest

Thousands of gallons of industrial finishes are supplied by The Forbes Division to industrial Finishing Company for metal office equipment.

Bright aluminum chairs receive a spray coating of Forbes' clear synthetic enamel as they move around a circular conveyor at the IF plant.



PITTSBURGH

PAINTS • GLASS • CHEMICALS •

PITTSBURGH PLATE

Maker

Of Metal Office Furniture

Uses Pittsburgh Enamels

Tough, long-lasting finishes add beauty and durability to modern, streamlined equipment made by General Fireproofing Company

THERE is no better proof of the quality and performance of Pittsburgh Industrial Finishes than the continued use of these famous coatings by outstanding manufacturers.

For instance, the Forbes Finishes Division has furnished the General Fireproofing Company of Youngstown, Ohio, Pittsburgh Industrial Enamels for many years to make its products look better and last longer. Recognized as the world's largest manufacturer of metal desks and office chairs, General Fireproofing is famous also as the maker of one of the finest complete lines of steel and aluminum furniture for trains, buses, steamships, hotels, banks, and other installations.

By working with GF's technical and engineering staff, Pittsburgh has produced high quality enamels to meet General Fireproofing's finishing requirements. These coatings provide exceptional adhesion, toughness, and durability. Because they are so easy to apply, they speed up production and save manufacturing costs.

PITTSBURGH PLATE GLASS COMPANY
Industrial Paint Div., Pittsburgh, Pa. Factories: Milwaukee, Wis.; Newark, N. J.; Springdale, Pa.; Atlanta, Ga.; Houston, Texas; Los Angeles, Calif.; Portland, Oregon. Ditzler Color Div., Detroit, Michigan. The Thresher Paint & Varnish Co., Dayton, Ohio. Forbes Finishes Division, Cleveland, Ohio. M. B. Suydam Div., Pittsburgh, Pa.

Free Advisory Service

General Fireproofing is just one of many manufacturers with whom Pittsburgh has worked in developing highly specialized finishes. This broad experience may be helpful in saving you time and money. Write, wire or phone the Pittsburgh Paint plant nearest you. We'll be glad to have one of our engineers discuss your finishing problems with you at no cost or obligation.

PAINTS
BRUSHES PLASTICS
GLASS COMPANY

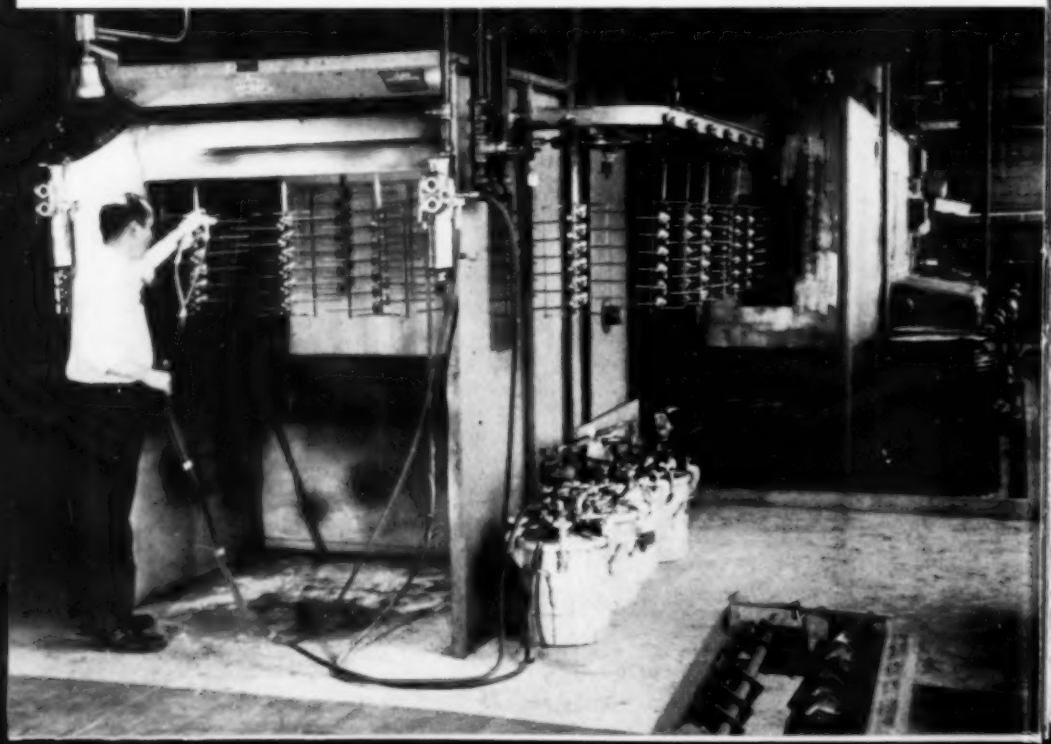
Small Parts Finishing System

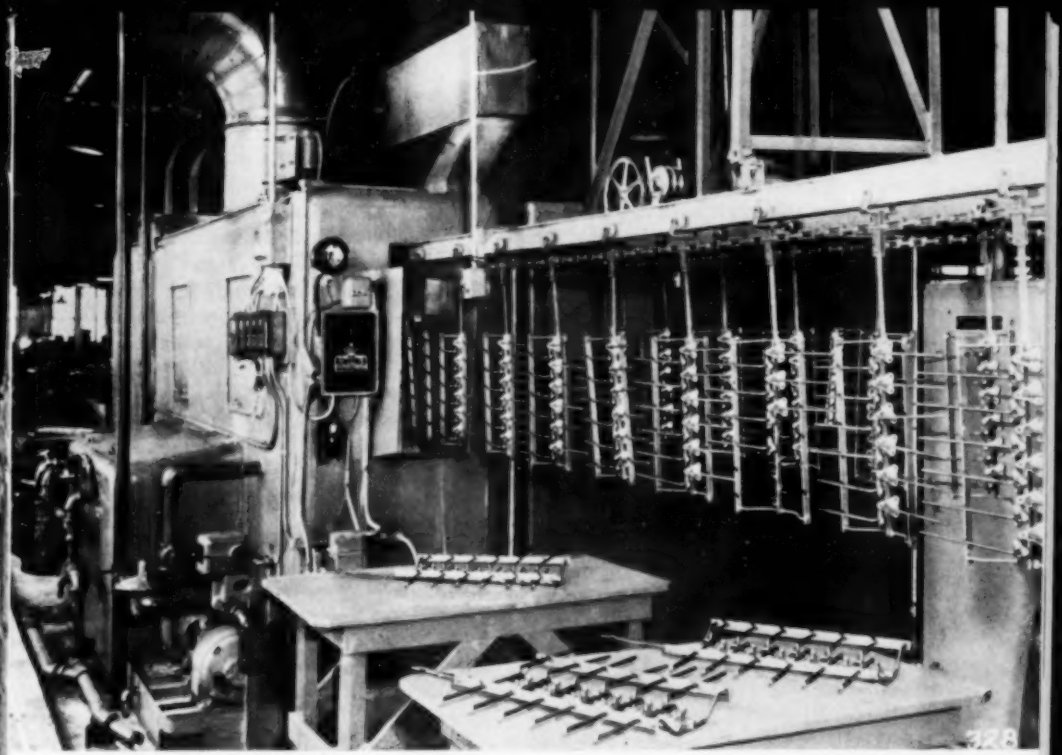
A NEW COMPLETE and unusually compact finishing system for small parts has been put into operation at the George R. Carter Co. plant in Detroit, Michigan. Designed and engineered by a metal cleaning and finishing firm, the system finishes approximately 1000 automobile trim hardware parts per hour, and is capable of finishing 2000 to 3000 parts per hour according to type. The finishing system includes a wash, rinse and hot-air blowoff machine, a water-wash spray booth, a paint bake oven and a conveyor system.

Includes loading parts on conveyor, washing, phosphatizing, rinsing, dry-off, spray painting and oven drying; with automatic safety features where required.

The parts, hanging on racks, pass through the system on a monorail conveyor. Racks may be spaced at equal intervals such as 8-in., 12-in. or 16-in., etc. Speed of conveyor is

Leaving cleaning machine, parts travel through water-wash spray booth and move on to oven.





Loading station of automotive hardware parts finishing room . . . up to 3000 parts per hour.

variable. Elevation of conveyor rail is 6½-ft. throughout.

First, parts are loaded on the conveyor and pass into the wash machine. The wash machine is divided as follows: Approach, 30-in.; wash, 24-in.; drain, 36-in.; rinse, 24-in.; drain, 30-in.; and hot air blowoff, 5-ft. The heated wash solution (phosphate type) is pumped at a rate of 125 gallons per minute from a 400-gallon solution tank. After draining, the parts are rinsed with hot water. Rinse water is pumped at a rate of 125 gallons per minute from a second 400-gallon tank.

Cleaning Solution is Recirculated; Filtered

The metal wash machine uses a recirculating system in which the solution falls back into the solution tank after being sprayed on the parts. From there it passes through coarse and fine filtering screens and thence back to the suction side of the new recirculating pump. After

By RALPH MARSON, Engineer
Cincinnati Cleaning & Finishing Machinery Co.

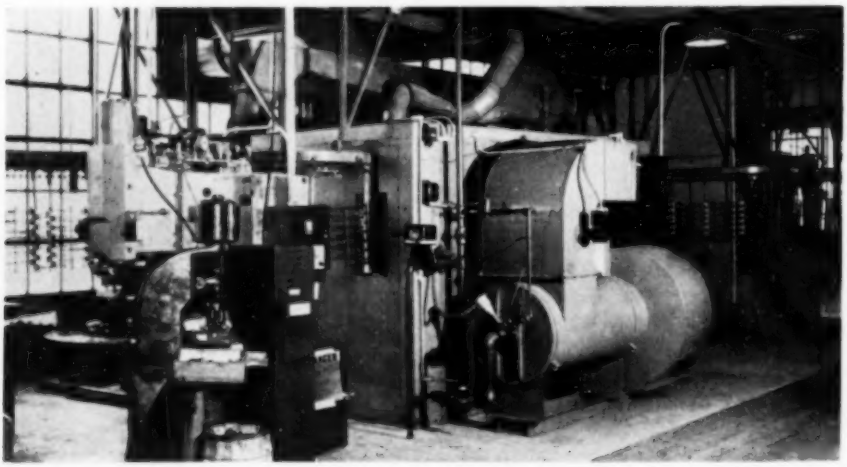
draining, the parts enter a hot-air blowoff chamber where the hot exhaust from the tank heating burner is circulated to dry the parts. The solution tanks are heated by a premix burner burning into a heat exchanger tube. The washing machine is positively vented by a duct fan driven by a ¾-hp. motor.

Spray Painting; Baking; Oven Regulators; Safety

After cleaning and drying, the parts make a 90° turn into the water-wash spray booth. Here, provisions are made for manual and automatic spraying. Leaving the spray booth, the parts enter a paint bake oven—a 3-pass oven in which the paint is baked for a predetermined period, such as 10, 15 or 20 minutes. Inside the oven the parts make two 180° turns and emerge on the side opposite the entrance. They then pass to the loading and unloading zone.

Oven heat is accurately controlled at the desired temperature by a high-low temperature regulator operating the main gas line solenoid valve. A gas-burning air heater heats the oven. A supply of fresh air is continuously brought in through a 20x20-in. air filter installed in the recirculating air duct. Air is exhausted from the oven by an exhaust fan on top of the oven. This fan draws air from the oven, blows part of it to the exhaust and the remainder to the hot air "seal" ducts. These ducts minimize heat escaping from the oven openings by blowing the hot air back into the oven.

In case the recirculating or exhaust fan should fail, air flow switches located in the ducts would be opened. This would cause the main gas and pilot valves to shut, as well as a safety valve with manual reset. A high temperature limit switch will close the safety valve if



An important part of the conveyorized setup—the gas-heated paint baking oven, showing air heating and fresh air supply connection at right of oven, exhaust system on top of the oven.

the oven regulator ever gets out of control and overheats the oven.

To light the oven the starter button for the fan motors must be pushed. The oven is purged for a predetermined length of time, controlled by a time delay relay. This insures that no explosive vapors are present when the oven is lit. After the purging cycle a button is pushed which opens the pilot solenoid valve and also causes a spark to ignite the gas. When the pilot gas is lit a control permits the main gas solenoid valve to open automatically. The oven is then in full operation. The purging cycle occurs each time the oven is relit.

Inside dimensions of the oven are: 11-ft. long, 5-ft. wide and 6-ft. 10-in. high. It is completely insulated with 4-in. of glass wool.

The entire finishing system is compact, occupying only 16x40-ft. By means of the variable-speed conveyor, the wide choice of rack arrangements and spacing, and the wide range of oven temperatures obtainable, an infinite number of finishing cycles are provided to accommodate the finishing requirements of a large variety of small parts on a mass production basis.

Bede Distributor Appointed for New York City

The Mutual Electric Co., one of the oldest and largest firms of its kind in the New York area, has recently taken on the distribution, sales and service of Bede Paint Heaters in the five Boroughs of New York City.

Mutual Electric now carries a full line of Bede Paint Heaters and is equipped to render complete service to users of Bede equipment for hot spray finishing. Bede heaters are sold nationally by Bede Industrial Products, Inc., 1110 Brookpark Road, Cleveland 9, Ohio.

Better cleaning cuts costs in aircraft production. This 48-page illustrated booklet outlines all the big cleaning jobs. Have you seen the latest Oakite recommendations on:

- ¶ How to clean aluminum before anodizing? *See page 4.*
- ¶ How to prepare aluminum for spot welding? *See page 10.*
- ¶ How to prepare aluminum for painting? *See page 15.*
- ¶ How to clean aluminum before and after heat treating? *See page 20.*
- ¶ How to strip paint from aluminum? *See page 22.*
- ¶ How to select and install cleaning tanks, rinse tanks, and spray-washing machines? *See pages 31 to 35.*

FREE For a copy of *"How to clean metal in aircraft production"* write Oakite Products, Inc., 32F Rector St., New York 6, N. Y.

OAKITE

SPECIALIZED INDUSTRIAL CLEANING MATERIALS • METHODS • SERVICE

Technical Service Representatives Located in Principal Cities of United States and Canada

Completely Finished . . . .

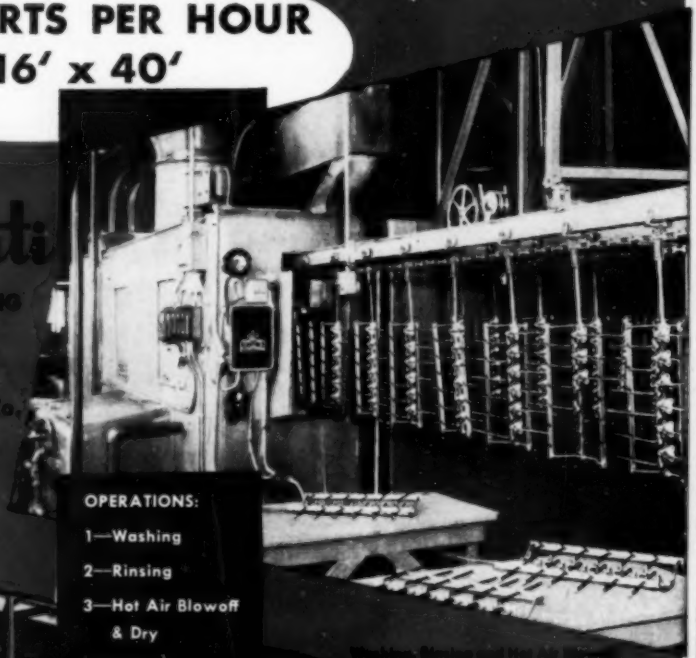
1000 PARTS PER HOUR in Space 16′ x 40′

ENGINEERED BY . . .

Cincinnati

CLEANING AND FINISHING MACHINERY CO.

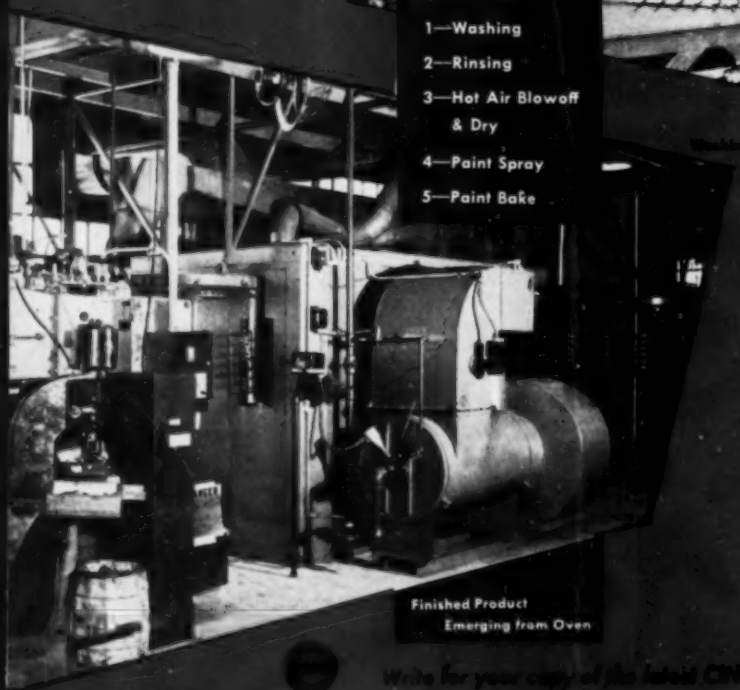
at The George R. Carter Co., Detroit, Mich.



Washing, Rinsing and Hot Air Blowoff

OPERATIONS:

1—Washing
2—Rinsing
3—Hot Air Blowoff & Dry
4—Paint Spray
5—Paint Bake



Finished Product Emerging from Oven

Unusually compact, this CINCINNATI-engineered small parts finishing system has proved to be a major improvement in The George R. Carter Company's production facilities. Complete finishing operations on automobile trim hardware, parts are performed efficiently and quickly.

With a minimum of adaptation this Cincinnati system can handle a large variety of small parts. Representative installations have shown savings up to 75% in time and cost.

Write for your copy of the latest CINCINNATI catalog today!

Cincinnati CLEANING & FINISHING MACHINERY CO., INC.

207 REGA STREET CINCINNATI, OHIO

Technique of Dipping

IN DIP FINISHING operations, a mechanical dipping device can be adjusted to improve the quality of the finish as well as produce a more uniform and a greater volume of production.

The mechanical dipping device may be only a "low dip" in a level section of overhead conveyor, in which case the work hanging from the conveyor enters the dip tank, passes through the coating material and then rises again to normal height as the coated objects pass over a drip pan which catches the drippings. Other types of dipping devices consist of vertical lifts that are mechanically powered.

It is necessary to position objects for dip coating so that all excess material will drain off the low point or edge. Racks or holders that hold the objects properly are necessary, because correct positioning is the first rule of dip finishing.

Next in importance is the speed of withdrawal. Regardless of the type of vertical lift used, the first requirement is that its speed can be controlled. It does not matter so much how fast objects enter the coating material—provided they do not plunge into it so violently that they produce a churning of the material and cause air bubbles.

The speed of withdrawal should equal the rate of flow of the material off the surface of the object dipped. If withdrawal speed is faster than this rate of flow, excessive film thick-

(Continued on page 85)

What's in a Name?
PLENTY!...
IF THE NAME IS
Prep-n-Cote
The Outstanding
PHOSPHATE COATING PRODUCT
for Iron, Steel and Aluminum
NCO
PREP PRODUCTS
are Available for the Following GOV'T SPECS:
JAN-C-490
MIL-C-10578
USA-57-0-2
and Others
Phosphate coating is an accepted procedure for preparing metals for enduring paint protection, and Prep-n-Cote represents the finest product for this purpose . . . Phosphate coat and chemically condition metal . . . Reduce phosphatizing and attendant maintenance cost . . . Eliminate sludge and scale from processing . . . provide a metal conditioning and phosphate coating process for all manufacturers regardless of their available equipment. Prep-n-Cote is economical to use.
WRITE FOR BULLETIN 48-91.
NEILSON CHEMICAL CO.
2682 Tecumseh Rd., Windsor, Ont.
6562 BENSON ST., DETROIT 7, MICH.
3411 Union Pacific Ave. Los Angeles 23, Calif.

Far to right is the trichlorethylene vapor degreaser. Just beyond is the spray booth, and at left mower bases leaving the oven and traveling to the parts stock room.

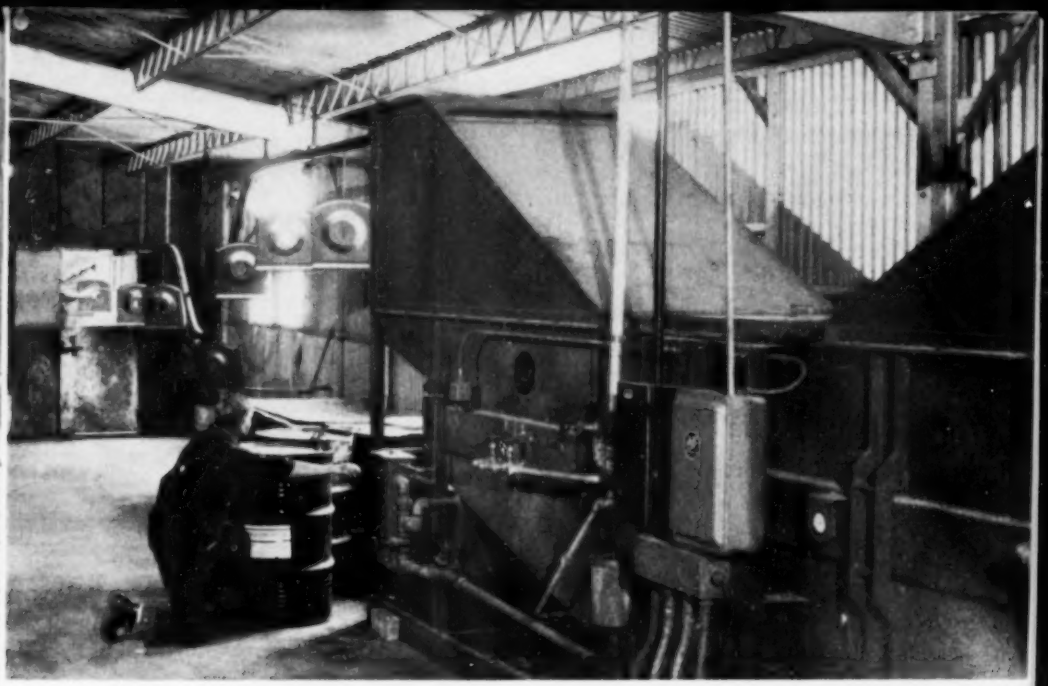
Hammer Finish For

I THINK we have hit upon quite an excellent protective and decorative coating for use on our electric lawn mowers. It is a combination of gray and green hammered finish. The handles, wheels and front guards are coated with a gray hammered finish, while all bases, switch covers and rear rotary flaps are finished in green. The upright motor goes in its original black finish.

This one-coat finish has good adhesion and excellent hiding qualities, which are important in these times of critical metal shortage—and because of the steel we sometimes have to use.

By SAMUEL STANDERFER, Production Foreman

[PAGE 30]



New Power Lawn Mowers

After fabrication, mower parts are hung on an overhead monorail conveyor which carries them through a trichlorethylene vapor degreaser to remove the light oil, dust and finger marks. Leaving the degreaser, the machine parts enter a water-curtain spray booth where the hammered finish is sprayed from a cup gun. Our spray man uses 60-lbs. atomizing pressure and a fluid pressure of 12-lbs.

Parts Are Vapor Degreased; Sprayed on Conveyor

Leaving the spray booth, the painted parts travel for eight minutes to provide an adequate flash (air dry) period before they enter a gas-fired oven where the gray hammered finish is baked for four minutes at 350° F. Mower parts, leaving the oven by conveyor, cool as they travel to the parts stock room. [*Continued on page 32*]

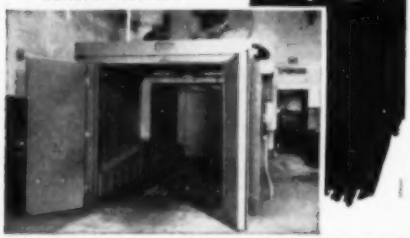
Allied Sheet Metal & Roofing Company, Houston, Texas

CARL-MAYER OVENS

Carl-Mayer exclusive design and patented features ensure the most efficient operation and outstanding fuel economy. Many installations.

Write for Bulletin No. 350

Enamel Drying, Japanning, Lacquering, Ceramic Drying



THE CARL-MAYER CORP.
3030 Euclid Avenue Cleveland, Ohio
Over 30 Years' experience

M&E MANUFACTURING COMPANY
PAINT SPRAY FINISHING SYSTEMS
INDIANAPOLIS 5, INDIANA

Yes. WE'D LIKE TO GET A COPY OF THE BIG NEW M & E SPRAY FINISHING EQUIPMENT GUIDEBOOK

M & E MANUFACTURING CO.
2569 Winthrop Ave., Indianapolis 5, Ind.

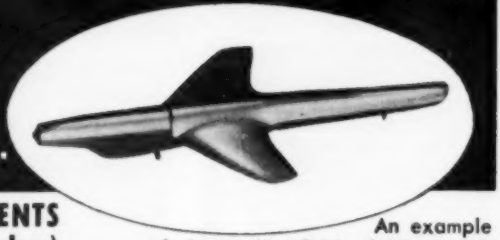
Please send (without cost or obligation) your M & E Finishing Equipment Guidebook.

Name .....
Title .....
Company .....
Street .....
City ..... State .....

Because we use the parts stock room system by which various parts are withdrawn for assembly, it is possible to separate the various parts of the mower into reasonably large lots for finishing. For example, handles, wheels and front guards, all of which receive a gray hammered finish, will be processed for several hours. Then we follow with bases, switch covers and rear rotary flaps which receive the green finish. As bases are removed from the conveyor, our name and trade mark decal is applied. [END]

Spraying one coat hammered finish in water curtain spray booth. Photograph, courtesy of Coast Paint & Lacquer Co., Incorporated.

MD Metallic Pigments for Industrial Finishes...



An example of chrome-like finish obtained with the use of MD 769 Aluminum Paste.

MD ALUMINUM PIGMENTS
(Pastes and Dry Flake Powders)
MD GOLD BRONZE POWDERS

MD Metallic Pigments meet a wide range of industrial finishing needs—from chrome-like finishes providing maximum brilliance and metallic lustre... polychrome, hammertone and other finishes... opalescent and irradescent effects in transparent enamels... to their incorporation in transparent and molded plastic products.

MD Aluminum Pigments can be used in air dry or baked finishes. They provide superior covering, smoothness and leveling. Available in leafing and non-leafing types.

MD Gold Bronze Powders have high pigment strength and fineness producing films of exceptionally high brilliance and smoothness in leafing vehicles as well as low cost coating.

Consult MD for your Metallic Pigments needs.

METALS DISINTEGRATING COMPANY, INC.
General Offices: Elizabeth B, New Jersey
Sales Offices: Chicago, Ill., Cleveland, Ohio
Plants: Elizabeth, N. J., Manchester, N. H., Berkeley, Calif., Emeryville, Calif.

1797 MD POWDER Since 1916

ALUMINUM PASTES
ALUMINUM POWDERS
GOLD BRONZE POWDERS

LINKED TOGETHER FOR BETTER SERVICE

Here's a chain of distribution and supply you should investigate. Members of the Solvents and Chemicals Group offer many products you need in the quantities you want . . . whether in drums, tank wagons, transports, or tank cars. Speedy delivery means that your order is in your plant within 24 hours, in most cases. Why not phone or write today for information.

THE SOLVENTS AND CHEMICALS GROUP

OFFICES AND PLANTS IN

BUFFALO—BUFFALO SOLVENTS & CHEMICALS CORPORATION,
Box 73, Station B — Bedford 1572

CHICAGO—CENTRAL SOLVENTS & CHEMICALS COMPANY,
2545 W. Congress St. — SEeley 3-0585

CINCINNATI—AMSCO SOLVENTS & CHEMICALS COMPANY,
4615 Reading Road — MElrose 1910

CLEVELAND—OHIO SOLVENTS & CHEMICALS COMPANY,
3470 W. 140th St. — CLearwater 1-3770

DETROIT—WESTERN SOLVENTS & CHEMICALS COMPANY,
8472 Solkirk Ave. — WAlnut 1-6350

FORT WAYNE—HOOSIER SOLVENTS & CHEMICALS CORPORATION,
Maumee & Baxter Rd. — ATlhany 0213

GRAND RAPIDS—WOLVERINE SOLVENTS & CHEMICALS COMPANY,
1500 Century S.W. — Grand Rapids 5-9111

HOUSTON—TEXAS SOLVENTS & CHEMICALS COMPANY,
8501 Market St. — Orchard 6683

INDIANAPOLIS—HOOSIER SOLVENTS & CHEMICALS CORPORATION,
1850 Luett St. — ATlantic 1361

MILWAUKEE—WISCONSIN SOLVENTS & CHEMICALS CORPORATION,
1719 S. 83rd St. — GReenfield 6-2630

NEW ORLEANS—SOUTHERN SOLVENTS & CHEMICALS CORPORATION,
1362 Jefferson Hwy. — Temple 4888

ST. LOUIS—MISSOURI SOLVENTS & CHEMICALS COMPANY,
419 DeSoto Avenue — GArfield 3495

TOLEDO—WESTERN SOLVENTS & CHEMICALS COMPANY,
Central & Reynolds Rd. — Jordan 0761

DISTRIBUTION . . .

HOW LEADING CHEMICAL COMPANIES DISTRIBUTE THEIR PRODUCTS

A few of the famous names represented partially or wholly by the Solvents & Chemicals Group.

Modern industry has proved that "building a better mousetrap" is not the sole solution to today's sales problems. In addition to producing better products, industry must constantly be on the lookout for faster, low-cost methods of getting their products to the user.

For many top-notch chemical manufacturers, this problem has been solved by a unique organization called the Solvents & Chemicals Group. The Group consists of eleven strategically located companies with offices, warehouses and bulk storage facilities in 13 key industrial centers. These companies, by affiliating for better service to industry, are able to offer important advantages to chemical producers. For example, the manufacturer can deal with one organization instead of eleven . . although stocks are maintained at widely separated points, materials can be shifted quickly should local shortages exist. Furthermore, the Solvents & Chemicals Group offers manufacturers an organization with financial responsibility and assured longevity.

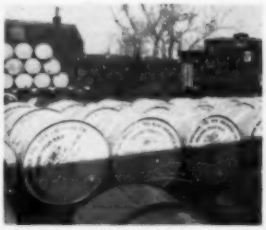
BETTER SERVICE TO CUSTOMERS

Geographically, the Solvents & Chemicals Group offers wide coverage. From Buffalo to St. Louis . . . from Milwaukee to Houston, customers get service and manufacturers get representation. Although the group handles products that are used throughout all industry, it has devoted particular attention to four major markets: the paint, varnish and lacquer industry, the metal-working industry, the graphic arts field, and chemical compounders.

SERVING THE PAINT INDUSTRY

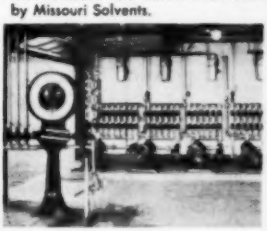
For many years, members of the Solvents & Chemicals Group have been major suppliers to leading paint manufacturers. By offering a complete line of solvents for coatings, each member is in a position to suggest the right product for specific formulations. By purchasing from a single source, manufacturers are able to control quality more easily. In addition to maintaining laboratories for their own quality control, facilities are available for technical assistance on solvents and chemicals.

Drums of Enjay's solvents being filled in the pumphouse of Grand Rapids' Wolverine Solvents.



Drums of chlorinated solvents from Dow Chemical are stored in St. Louis by Missouri Solvents.

Publicker's Paco alcohols and acetates are speeded to users by fleets like this one of Detroit's Western Solvents.



American Mineral Spirits are quality-controlled with installations such as this from Cincinnati's Amsco Solvents.

HOW THE METAL WORKING INDUSTRIES BENEFIT

Supplying the immense metal-working industries with solvents for metal cleaning is only part of the job done by the Solvents & Chemicals Group. Each member furnishes solvents for vapor degreasing, for cold or warm wash . . . in agitated, spray or dip-type operations. In addition, Group members stock complete lines of solvents for paints and enamels used in organic finishing. Specific products are available for electro-static, hot spray, spray, dip, flow or roller-coating processes.

CHEMICAL COMPOUNDERS, TOO

Makers of polishes, oils, insecticides, disinfectants, soaps and pharmaceuticals secure many of their basic materials from the Solvents & Chemicals Group. Waxes, detergents, chlorinated solvents, alcohols, extraction and formulation solvents, terpenes, rosins and talloil are available for specific needs. Specialized attention from 13 strategically located plants has resulted in a constantly increasing demand for the products and services of the group.

HERE'S HELP FOR BOTH USER AND PRODUCER

If you purchase solvents and chemicals, the members of the Solvents & Chemicals Group can, quite probably, offer you a superior source of supply . . . saving you time, work and money. If you manufacture solvents or basic chemicals, look to the Group for a better method of distribution. Inquiries from both users and producers of solvents and chemicals are invited. Contact the Group member nearest you for information on how your firm may benefit from the Solvents & Chemicals Group.

Linked Together For Better Service

THE SOLVENTS & CHEMICALS GROUP

ALCOHOLS • ACETATES • KETONES • TERPENE SOLVENTS WAXES • AROMATIC SOLVENTS • NAPHTHAS • CHLORINATED SOLVENTS • PLASTICIZERS • STEARATES ROSINS • DETERGENTS • ALKALIES • GLYCOLS • AMINES

WESTERN DETROIT

A VITAL LINK

WESTERN SOLVENTS IN DETROIT

A MEMBER OF THE SOLVENTS & CHEMICALS GROUP

In Houston, it's Texas Solvents. In Buffalo, it's Buffalo Solvents. And in Detroit and Toledo . . . it's WESTERN! Yes, Western is another vital link in the chain of service offered by the Solvents & Chemicals Group. For 39 years, leading firms in the Detroit and

Toledo areas have relied on Western to deliver the goods. Whether you make paints or clean metals . . . whether you laminate paper or compound soaps . . . whatever you do that requires solvents and chemicals, you can be sure of better service when you call Western.

WESTERN

Solvents & Chemicals Company
6472 SELKIRK AVENUE
DETROIT 11, MICHIGAN
Telephone: WAlnut 1-6350

CENTRAL & REYNOLDS RD.
TOLEDO, OHIO
Telephone: JORDAN 0761

"Putting the Finishing Touches on Furniture"

Furniture men from all over the United States will meet at the Schroeder Hotel in Milwaukee, Wis., June 24, to hear the experts tell how to make the task of the finishing simpler, at the sixth annual meeting of the Forest Products Research Society.

Moderator for the session on "Furniture Fin'shing" will be C. S. Powell.

"Synthetic Resins and their Use in Furn'ture Finishing" will be discussed by Mr. W. S. Robertson, E. I. Du Pont de Nemours, Inc. Robertson will trace the development of synthetic resins prior to World War II and bring them up to date. The use of synthetics compared to lacquers and other finishes is covered in this paper, with cost data and operating times featured.

R. C. Wint will report on "Wood Finishing With Hot Spray Lacquer." Wint will base his report on his experience with the Cellulose Products Department of the Hercules Powder Co. He states that if the current trend continues, 75% to 85% of all future wood furniture will be lacquered.

Technical aspects of hot-lacquer finishing will be discussed as well as experiences of manufacturers using this method.

This is only a small part of the over-all program that is scheduled for this meeting, which was set up to coincide with the Chicago Furniture Show so that manufacturers and their representatives will be able to stop at nearby Milwaukee to learn of the latest developments in furniture manufacturing.

New A-M Coatings Division Headed by Louis K. Buell

Louis K. Buell has recently rejoined American-Marietta Company as chief chemist in charge of research and development in the new Coatings Division.

In his new position, Mr. Buell will concentrate chiefly on the improvement, production and application of roll coat finishes capable of withstanding severe mechanical forming.

Mr. Buell, previously associated with American-Marietta in charge of enamel development is well known in industrial finish circles, having spent the past 20 years in research activities. It is anticipated that his knowledge and wide experience will substantially augment A-M's interests in this field of specialized finish application.

A completely equipped laboratory for Mr. Buell and his staff including ovens, coating machines and physical testing equipment is being set up in Kankakee, Illinois. Particular attention will be directed toward the improvement of steel pre-coating finishes for application to new products.

Rebuilt Exchange Program Introduced by DeVilbiss

Inauguration of a new service plan is being announced by the DeVilbiss Co., Toledo, Ohio, manufacturer of spray finishing systems. Known as the Rebuilt Exchange Program, it makes DeVilbiss rebuilt exchange equipment available for immediate delivery to users having DeVilbiss products for rebuilding.

Every Authorized DeVilbiss Sales Outlet and factory branch in the U. S. will offer this exchange service, and rapid service will be backed up by six factory rebuilding centers which the company has established at Chicago, Ill.; Santa Clara, Calif.; Dallas, Tex.; Atlanta, Ga.; Newark, N. J. and at the main plant in Toledo.

The exchange units are completely rebuilt by factory trained technicians and incorporate all design improvements that affect life or performance. They carry the same guarantee as new units.

In inaugurating the new program, which has been in development for almost two years, DeVilbiss will limit exchanges to its most widely used spray guns, types P-MBC and MBC-510, and its complete line of air compressors. As rebuilding facilities are expanded, other equipment will be included.

For customers' protection, all rebuilt exchange spray guns will be sealed in transparent plastic bags labeled, "Do not accept this if this bag is opened" and all rebuilt exchange air compressors will bear suitable identification labels.

Metals Disintegrating Appoints Hoffman Co. in Indianapolis

The appointment of August Hoffmann Co., of Indianapolis, Ind., as a distributor of its MD Aluminum Pastes and Powders and MD Gold Bronze Powders, in Central and Southern Indiana, is announced by Metals Disintegrating Co., Elizabeth, N. J., manufacturer of metal pigments, metal powders and metal abrasives.

MD will continue direct contact with metal pigment users in this area through its Pigment Sales Supervisor, Mr. John A. McKinley.

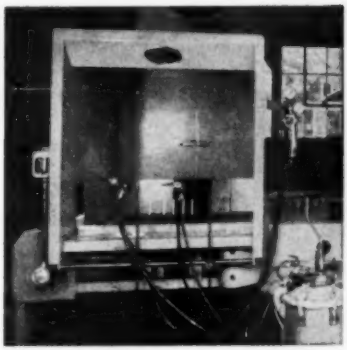
The improvement in contact and service resulting from this new arrangement is in keeping with the company's policy of extending continued efforts to provide better products, better service and better technical assistance to users of metal pigments.

AUTOMATIC ELECTRIC SPRAY BAKE CONVEYOR COATING MACHINE

Pays For Itself in Regular Production Within 3 to 6 Months

Has Built-in Drying Chamber and Electric Strip-heated Oven

- Equipment includes conveyor, water-wash or dry-spray booth, drying compartments, electric strip-heated oven, controls, etc.
- Handles pieces from 1-in. diameter to over 12-in. in diameter.
- Pieces on work holders are automatically sprayed . . . travel through a drying chamber for solvent evaporation, and then into electric strip-heated bake oven.
- Excellent for shell noses, cartridges, weapon parts, clocks, pens, pencils, hardware, etc.
- Produces a high quality finish and exceptional savings on sizes and shapes that are difficult to handle.



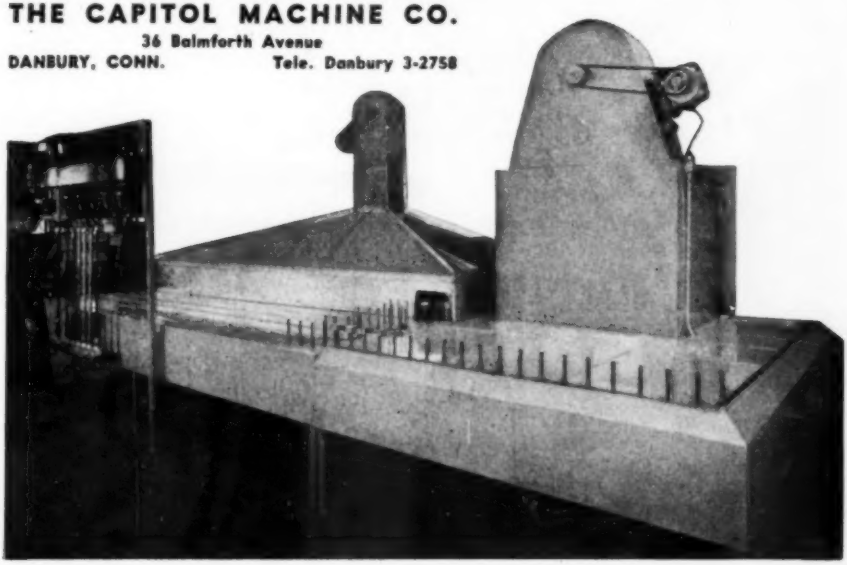
View of booth showing automatic spray guns — lower view shows conveyor arrangement and drying and baking compartments.

Let us make a test run of your own work samples—for time study and cost analysis—no obligation.

THE CAPITOL MACHINE CO.

36 Balmforth Avenue

DANBURY, CONN. Tele. Danbury 3-2758



BLAKESLEE degreasers use less solvent.

ECONOMY is the key to Blakeslee Solvent Vapor Degreasers. Comparison proves that through patented construction and operational features you save more on solvent—gives you lower production costs. "Use less solvent to clean parts of any size or shape."

SEE BLAKESLEE AT
SPACES S-17-18
INDUSTRIAL FINISHING EXPOSITION
JUNE 16 to 20
INTERNATIONAL AMPHITHEATRE

Write today for full information

BLACOSOLV the highest stabilized degreasing solvent

G. S. BLAKESLEE & CO.
CHICAGO • NEW YORK • TORONTO

1844 So. 52nd Ave.
CHICAGO 50, ILL.

SOLVENT VAPOR DEGREASERS in standard or special conveyor models

NIAGARA-METAL PARTS WASHERS—built to fit your needs

CANADA
G. S. BLAKESLEE & CO., LTD.
18 Cranfield Rd.
TORONTO 13, ONTARIO

Painting the Hay Baler

BY WALTER RUDOLPH

HAY BALERS must be tough because, although farmers are turning more and more to mechanization in their work, they are inclined to abuse farm machinery and leave it outside in all kinds of weather. Accordingly, the New Holland Machine Co., manufacturer of automatic hay balers in New Holland, Penna., has had to devise an efficient way to apply a durable, all-weather paint to its products. New Holland worked closely with a paint manufacturer, first of all, to develop a weather-resistant, economical, easily applied one-coat paint job.

Because bright colors are popular in agriculture, a shiny red synthetic enamel was chosen for use on the bodies of hay balers, and a synthetic yellow for the wheels. Power units — gasoline-driven engines which are mounter on balers —are purchased from an outside source and can be any one of several complimentary colors.

Balers are somewhat intricate and complex in appearance largely because of a number of exposed parts that are necessary to automatically pick up hay from windrows, compress it into a bale, tie the bale with wire or twine, and

eject it from the machine without human aid. The machine is a bulky awkward-looking product as it moves down the assembly line while being made ready for testing and painting.

The baler frame is made up principally of structural steel to which are attached side, top and bottom plates, some 3/16-in. in thickness and all of hot-rolled mild steel. After the essential frame is welded and bolted together, the assembly moves on a 4-wheeled dolly from the welding areas to a frame cleaning station.

Smoothing and Cleaning Before Painting

New Holland has tried various anti-spatter compounds to simplify this first smoothing and clean-up, but found them generally unsatisfactory; so the cleaning proceeds on untreated, weld-spattered metal with hand scrapers for light or small spatter balls, and pneumatic scraping tools for larger spatters.

Also, while at this first "station", the frame assembly is brushed with naphtha to remove dirt and grease from the fabricated parts. The naphtha quickly evaporates and the frame is moved on down the assembly line.

Various sub-assembled parts, some fairly large, are added to the automatic baler. This is done primarily by bolting them on. Naturally, these added parts are often grimy with oil and shop dirt which is also imparted to the clean frame. Upon completion of assembly, the entire rig is gone over manually with rags wet in naphtha. This cleaning is supplemented by blowing all surfaces with a compressed air gun.

Masking; Spray Painting; Down-Draft Exhaust

The paint spray booth (20x35-ft.) has no ceiling, but it can be closed at both ends with double doors. Some masking is done—for instance, on such parts are the hydraulic pump gauge—and the yellow wheels are covered with simple canvas slip-overs.

In the closed spray booth two spray painters work on both sides of the machine. Paint is piped to the spray booth from a 55-gallon tank in a room on a lower level of the building. Two tanks are installed, with T-connection for quick switch-over. Ordinary galvanized pipe is used throughout the paint circulating system.

Each hay baler requires about 35 minutes to paint completely, and it is covered with about 2½ gallons of paint.

Paint overspray and fumes are exhausted from the spray booth by down-draft suction, through steel grating in the floor. The overspray passes through a water bath wherein some 3000 gallons of water are circulated per hour; the cleaned air is vented through three large pipe-towers alongside the building.

Force-Drying Facilities Speed-up Production

This one-coat application of synthetic enamel is designed to dry at room temperature, for handling, in about four hours. However, since New Holland has stepped up its production in recent months, facilities have been added for force

28 Years of Experience In the Sale and Service of

CHEMICALS TO CLEAN and PREPARE METAL for PAINTING

Surphos CLEANER and PRODUCER OF PHOSPHATE COATINGS.

Sol-Klean PHOSPHORIC ACID RUST MOVER AND ETCHER.

Industro ALKALI CLEANERS, STRIPPERS and AIR WASH COMPOUNDS.

Industrosolv SOLVENT EMULSIONS FOR SPRAY WASHING MACHINES.

SOL-KLEAN prepares steel and aluminum for painting, removing rust, oxide and oil. It etches the metal and gives a thin phosphate coating. One volume of Sol-Klean, diluted with 3 volumes of water, usually brushed on the metal at room temperature. It penetrates oil and dissolves rust. Sol-Klean is removed together with the dissolved oil and rust by wiping with rags or flushing with water. Metal may also be cleaned and treated by immersion in hot Sol-Klean and rinsing in water. Sol-Klean is non-inflammable and evolves no toxic or corrosive fumes.

SURPHOS cleans and produces a phosphate coating on sheet steel, machined and cast iron. It anchors the paint finish and increases its humidity and salt spray resistance. Use hot (one ounce per gallon solution) in Power Wetting Machine or dip tank. Acid proof equipment not needed.

NOTE:

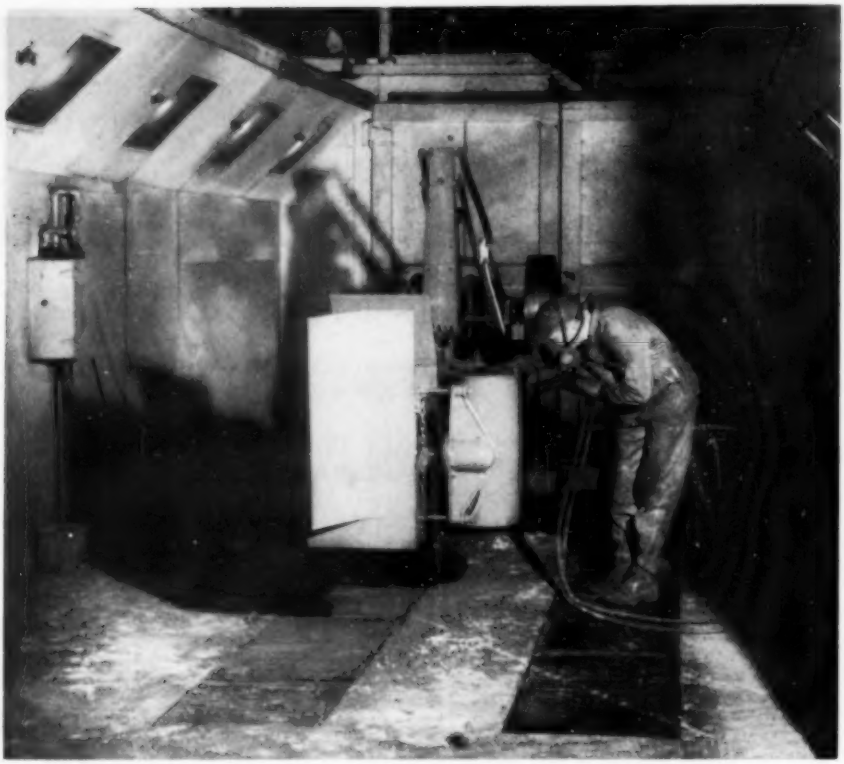
Consult Us On Your Government Specification Requirements

INDUSTRIAL CHEMICAL PRODUCTS COMPANY

3778 BELLVUE AVENUE DETROIT 7, MICHIGAN

Representatives In Principal Cities

IN CANADA, MADE AND SOLD BY BOYLE CHEMICALS LTD. LONGBRANCH, ONT.

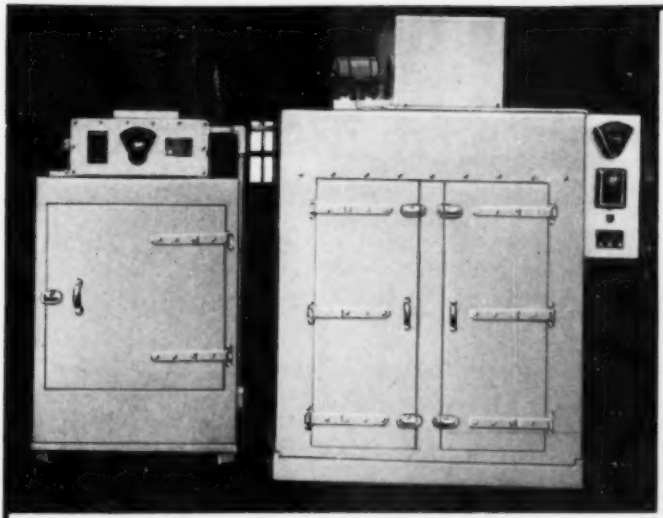


Inside the down-draft spray booth where two men work, one on each side of masked machine.

drying the painted surfaces more rapidly. Air is forced over steam coils where it is heated to between 140° and 150° F. In this force-drying room, a baler remains for 30 minutes and is then allowed a 15-minute air-drying interval before it is ready to be handled.

In another part of the plant, the pick-up and feeder parts of a baler are assembled; much the same procedure before painting holds forth here, except that New Holland is giving a final cleaning to such parts with a different cleaning material —a commercial cleaning compound mixed with water. Here, also, force drying facilities have been added for drying the painted surfaces.

We might note that paint for the spray booth was formerly agitated with a hand-stirring crank at the top of a 55-gallon drum. The maintenance department was called on to remove this chore, thus improving painting time and quality of the finished job. An air motor was rigged on a three-pronged base atop the paint drum to provide continuous power agitation. [END]



Large or Small...

YOUNG & BERTKE

OFFER YOU THE BEST IN OVEN DESIGN

Batch-type, Electrical Ovens in small or large sizes — one and two door. Vertical or Horizontal flow type. Compact, low cost efficient ovens for general utility purposes to save costs, time and speed contracts.

Ovens designed around the product to be finished for ideal operating conditions. Ovens of rack, conveyor, drawer, portable or tunnel drying types with temperature controls, circulating air fans or other special equipment. Ovens designed to increase production.

Thermostat controls temperature accurately at any point between 100° F and 600° F. Accurate work and data can be secured. Balanced direct motor driven centrifugal fan.

Open Coil Design — Low Gradient

Fiber Glass Insulation

Forced Convection Heated

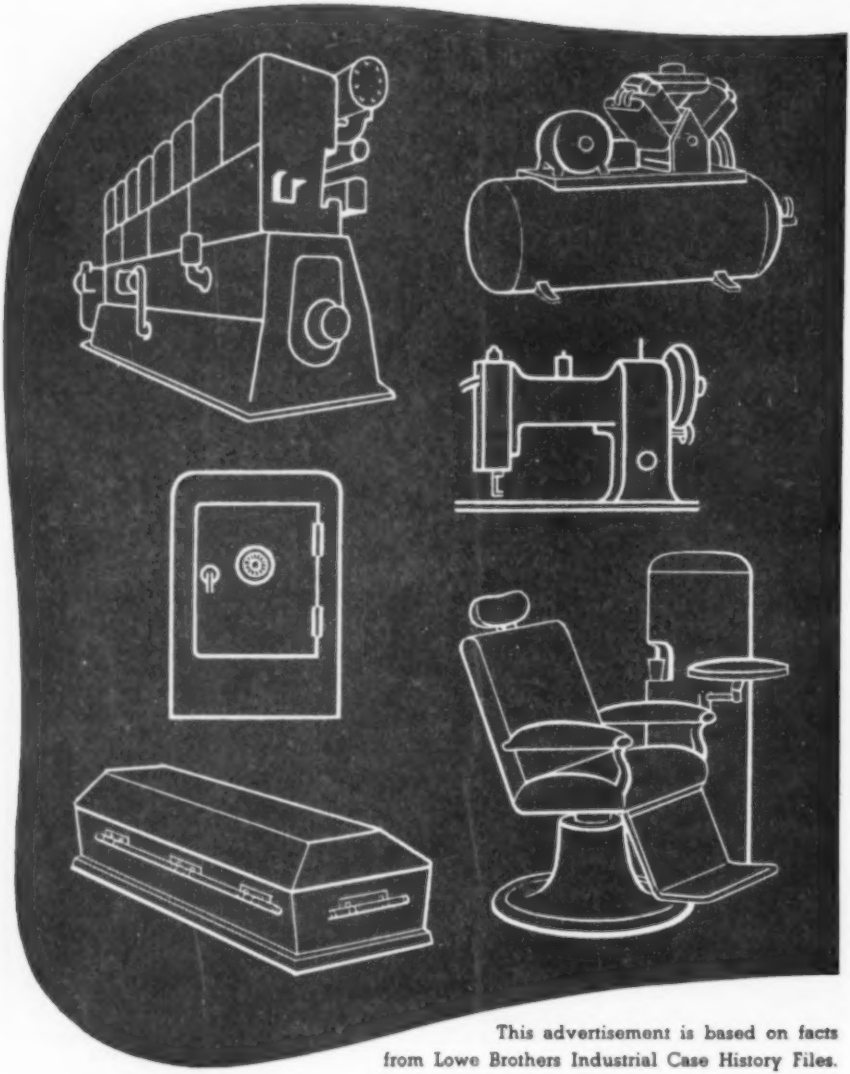
Latest Type Indicating Controls

The YOUNG & BERTKE Co.

OVENS • SPRAY BOOTHS • DUST and FUME CONTROL

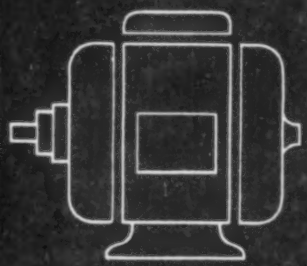
2250 BUCK ST. CINCINNATI (14), OHIO

Finishing time cut 50%...
...another



This advertisement is based on facts from Lowe Brothers Industrial Case History Files.

sanding eliminated entirely! THERMO SPRAFIL true story



*Lowe Brothers Thermo Sprafil System puts new economy into the finishing of a wide variety of products including: motors . . . vaults & safes . . . diesel engines . . . dental equipment . . . sewing machines . . . metal caskets . . . air compressors . . . steam turbines . . . medical & hospital equipment . . . shoe machinery . . . laundry machinery . . . metal stitchers . . . beauty shop equipment . . . generators . . . electrical control panels . . . clothes pressing machinery . . . machine tools . . . many others!

A large motor* manufacturer, wanting to speed production and lower finishing costs, recently installed the new Thermo Sprafil system upon the recommendation of a Lowe Brothers "Finishing Specialist." Results: Overall finishing time on each motor has been cut in half! Thermo Sprafil has entirely eliminated need for sanding. Savings in labor and material costs have been effected accordingly.

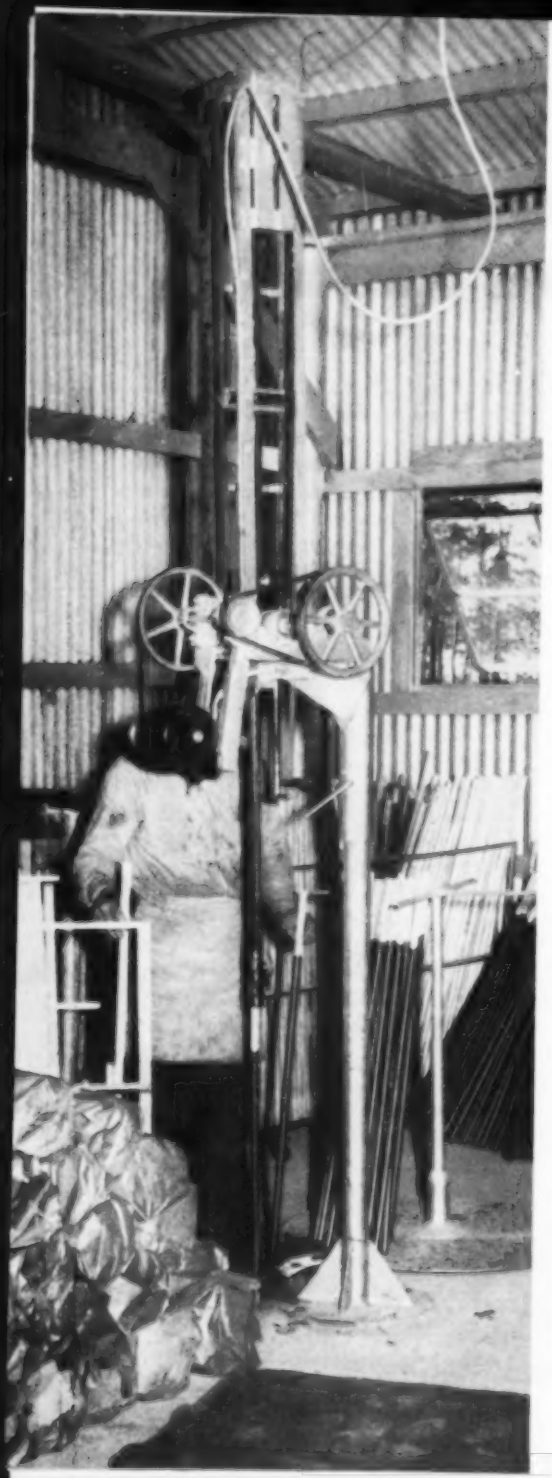
Similar facts are being reported daily by other alert manufacturers who have put Thermo Sprafil into their finishing operations. They're all finding that it sprays on smoothly, evenly . . . air dries in 4 hours . . . bakes in one hour at temperatures up to 300° . . . always dries free from pin-holing . . . vastly reduces sanding time or completely eliminates need for it . . . provides a fine surface for finishing, even though the surface of the steel being used might not be up to usual standards of smoothness!

Why not check into Thermo Sprafil now? It may mean sizable savings in money and time for your particular finishing operation. A Lowe Brothers "Finishing Specialist" will be happy to discuss it with you. Write today.

THE LOWE BROTHERS COMPANY
DAYTON 2, OHIO
INDUSTRIAL DIVISION

LEADERSHIP THROUGH CONSISTENT SERVICE

Lowe Brothers
FINISHES FOR INDUSTRY



Broom Handles Gasket Dipped Mechanically

BY W. E. OWENS
Owens Handle Co.

THROUGHOUT the years little progress has been made in finishing broom and mop handles, over the somewhat primitive hand dip and squeegee process. Our method of coating these handles follows the hand dip principles, except that it is mechanized. In other words, a motor-driven hand and arm grasps the end of an unfinished broom handle, pushes it straight down through the round hole of a washer-shaped flexible rubber gasket and into the tubular tank of coating material, then withdraws it and releases it to the operator.

Gasket-Covered Dip Tank With Supply Reservoir

Our dip tank extends down below the factory floor. The tubular tank is 4½-in. in diameter by 5-ft. long, and has a supply reservoir on one side at the top, as shown by sketch

Illustration at left: The principal motor driving mechanism is supported on a pedestal extending up higher than a man's head. Part of what actuates the mechanical arm extends on up beyond ceiling height. The operator is merely a feeder and offbearer for the mechanical arm which does the vertical dipping and withdrawing with mechanical precision.

QUALITY LACQUERS and FINISHES

For WOOD and METAL SURFACES

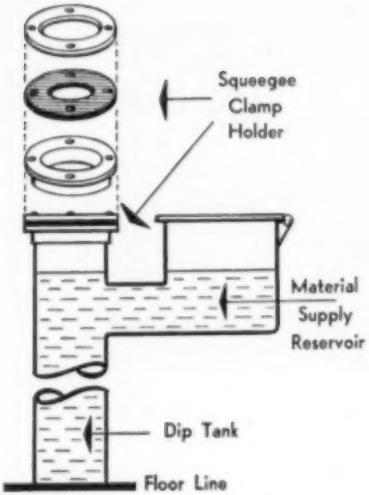
- Hot Lacquers
- Furniture Finishes
- Industrial Lacquers
- Government Specification Coating and Thinners

COAST LACQUERS cost less because we pass along to you the savings made possible by our immediate contact with the huge chemical plants of the Gulf Coast from which we obtain our superior raw materials at low cost. Write for information and prices.

CPL

COAST Paint & Lacquer Co. Inc.

P. O. BOX 1113, HOUSTON 1, TEXAS



Cross section sketch of tubular dip tank with washer-shaped rubber squeegee at top and material reservoir at side.

which accompanies this article. This supply reservoir serves a dual purpose; its hinged or snap cover affords a convenient place for filling the dip tank, and here the operator can quickly and easily measure the height of coating material in the tank.

The length of repeated dip-strokes does not vary as in manual dipping, therefore the coating material must be maintained at the proper height in the tank in order to coat all handles the same. On top of the long tubular shaped tank we have a hinged squeegee clamp-holder which, when in operating position, is just slightly above floor level. This clamp holds the washer-shaped soft-rubber squeegee, the inside edges of which scrape off excess coating material as a dipped handle is withdrawn from the tank.

Dip Arm is Like Traveling Arm of Spray Machine

The vertical dipping arm of the motor driven machine is centered above the tubular dip tank. This machine resembles part of a chain driven, reciprocating spray machine in construction. The lower end of the traveling extension arm has a flared-edge automatic clutch which clamps and holds the end of a wood handle on the down stroke, as the handle enters the dip tank; this clutch retains its grip on the handle as the handle is withdrawn straight up from the tank, through the rubber squeegee. At the top of the stroke the clutch is automatically tripped to release the coated handle and it remains open until another handle is inserted, when it automatically closes again.

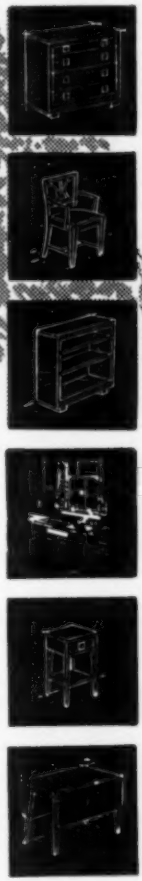
The machine is adjustable in height to take handles of any length up to 4-ft. The length of the stroke may also be adjusted to coat handles any desired distance along their length.

Speed range of the machine is from 600 to 1200 strokes per hour. The rate at which handles can be dipped depends upon length of the handle and the dexterity of the operator. On all ordinary length broom and mop handles a nimble fingered operator can dip coat 750 handles an hour.

We make handles of gum, oak and yellow pine, in diameters of ¾, ⅞, 15/16, 1-in., 1-1/16 and 1-⅛-in. Holes in the rubber squeegee are punched ¼-in. smaller than the diameter of the handle to be coated. Naturally the round center hole in the rubber squeegee must

PA 2063

(Synthetic Undercoat)



Opens new roads for using fir and other marginal woods!

Excellent filling and holdout properties are two of the advantages which make United's PA 2063, synthetic undercoat, ideal for use on fir and other open grained marginal woods.

When coated with PA 2063 and then covered with a synthetic enamel or other top coat, these woods give the appearance of, and can be used as gum woods.

PA 2063 is easily sanded, dries quickly, and requires only one coat. It holds down the wood grain while preventing a glossy top coat from sinking in.

A generous working sample of PA 2063 is yours for the asking. Get yours today.

PAINTS • SYNTHETICS UNITED LACQUERS • ENAMELS

United LACQUER MFG. CORP.

LINDEN, N. J. EVERETT 49, MASS.

PHILADELPHIA 19, PA.

be smooth and clean cut so that its edges, which contact dipped handles, will scrape off the surplus coating material effectively and with uniform pressure all around as each handle is withdrawn.

The material used for coating is a 50% solids clear or pigmented dipping lacquer. The better grade handles are given two coats; cheap handles receive only a single coat.

Handles are Wax Polished in Tumbling Barrel

After handles are thoroughly dry they are placed in a horizontal tumbling barrel which contains powdered wax. They are tumbled for 20 to 30 minutes to give them a smooth waxed surface polish.

Dip coated handles are put in a tumbling barrel and rotated with powdered wax to give them a smooth polished wax finish.

Before You Finish Old Panel Stock

HAVE YOU had any trouble finishing ply panel stock that has come out of storage? If so, try belt sanding it, then standard glue sizing the surface, and finally a good block sanding.

If you are assuming that panel stock that was glue sized before storage need not go through this operation again, then you are overlooking the fact that, due to physical and chemical changes that occur under storage conditions, those panels should be considered as rough panels and must be subjected to complete sanding and glue sizing operations again.—*H. Hardesty.*

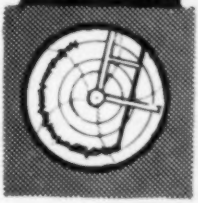
A Reader's Comment on Hammer Finish Article

Have just finished reading the Hammer Finish article by William Beacham in the April issue (pages 55-56) in which he sets forth logical and comprehensive steps in the use of the novel finish. His outline of production methods and equipment, however, may possibly discourage the use of a hammered effect material by the occasional user, such as myself, who has only the ordinary set-up used in automotive refinishing . . . .

Several years ago I was privileged to be one of the earliest users of the one-coat hammered finish before it was being offered to the general trade. Our shop had been taking in a number of high-profit specialty items that other places had turned down, such as business machine cases, etc; also, we had need for such a finish in the interiors of used cars, in the older models where a minimum of preparation is used.

The representative of one of the larger manufacturers happened to

Tested "70 Hours at 300°F"



POLARLUX-7 has been tested to withstand 300° continuous heat for 70 hours, without becoming brittle, without losing its toughness, adhesion and flexibility, and . . .

"Without Yellowing"

Polarlux-7

WHITE BAKING ENAMEL

ABSOLUTE, ENDURING WHITENESS!

"For the best—Buy U. S."

POLARLUX-7 can be baked for 10 minutes at 350°; 15 minutes at temperatures between 300° and 325°.

POLARLUX-7 literally cannot be overbaked. It has exceptional resistance to humidity, salt spray and alkali. For details and samples, write:

U.S. Industrial Finishes

A U.S. Industrial Finish SELLS your product—wood, metal or plastic—through enhanced appearance and increased surface wearing qualities.

Our Research Laboratories and staff are among the finest in the industry. These facilities and personnel are at your service in the solution of any finishing problem.

U.S. Paint, Lacquer & Chemical Co.

— CHICAGO — ST. LOUIS — KANSAS CITY — MEMPHIS —

General Offices: 21st and Singleton; St. Louis 3, Mo.

mention that they were working out a new one-coat material and sent samples, with the request that we report on its performance. I tried it first on some instrument panels with excellent results, then on some adding machine cases, and later I went on to larger work as will be described here.

The equipment I have used all along is the standard MBC-30 siphon type cup gun or its equivalent, such as most automotive shops use. In setting the gun I always use full opening in the fluid adjustment, and a medium width fan pattern. As to getting the right air pressure, I go about it just opposite to Mr. Beacham. I start so low that the material will not lift out of the cup; then gradually increase it until a satisfactory flow is attained.

I have learned that, even with proper fluid pressure settings, the hammer pattern obtained varies with the amount of material and the speed of application on the work; therefore, I tried to get an even coat all over the piece as quickly as possible, usually by "cross coating" and trying to avoid over spray on sections previously coated. With special spray heads, such as used by Mr. Beacham, and pressure pots, this would naturally be a lot easier.

About the time we had learned the technique of applying the hammered finish a lady brought in some pieces of metal furniture which we finished satisfactorily. Then she brought in the contents of several apartments that she owned, including bedroom suites and dinettes — in short, the works. All of this furniture was sprayed with different pastel tints of hammered enamel; she later reported that, for rental furniture, it withstood abuse remarkably well.

While we have made out with our minimum equipment I would like to point out that for economical production work a setup such as described by Mr. Beacham is necessary, and if he had not invited comment I would not be offering our experiences with the hammered finish.—*Al Matlock.*

Every student attending the Binks School of Spray Painting takes a spray gun apart and then puts it back into operating order. By examining the actual insides of a gun, each man understands and appreciates the why and wherefore of correct spraying.

New L. A. Bldg. Triples Kidde's West Coast Service Facilities

A new 6000-sq.ft. office, showroom, and service building has been opened in Los Angeles, by Walter Kidde & Co., Inc. It is located at 4845 W. Exposition Boulevard, and will triple the facilities available for Kidde's west coast district's organization.

The structure will house southern California's most modern and complete fire extinguishing equipment sales and service organization. Included in the new building will be a display room for fire protection products in addition to expanded recharge and repair facilities with complete hydrostatic testing equipment for all types of high pressure cylinders. About one-third of the building will be used as office space with the remainder devoted to showroom and service space.

Sales and service of the District office's industrial products are under the direction of Fred Buckley, while sales of equipment for aircraft are headed by John Noble.

SPRAYON "PUSH-BUTTON" TOUCH UP

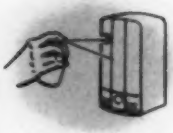
PROVED AND ACCEPTED BY THE LEADERS OF INDUSTRY

USED BY THESE FAMOUS FIRMS

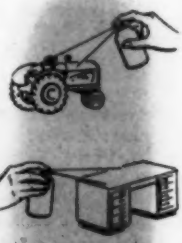
★

Addressograph-Multigraph Corp.
Allis Chalmers Manufacturing Co.
American Kitchens—Div. of Avco
Art Metal Construction Co.
Automatic Canteen Co.
Bell Telephone Co.
Berger Manufacturing Division, Republic Steel Corp.
J. I. Case Co.
Coca-Cola Bottlers
Crosley—Division of Avco
Delco Products Division, General Motors Corp.
Allen B. DuMont Laboratories, Inc.
Frigidaire Division, General Motors Corp.
General Electric Co.
The General Fireproofing Co.
International Harvester Co.
Jaeger Machine Co.
The Maytag Co.
Metal Office Furniture Co.
Monroe Calculating Machine Co.
Nash-Kelvinator Corp.
National Ventilated Awning Co.
New Holland Machine Co.
Remington Rand, Inc.
F. C. Russell Co.
Scott Atwater Manufacturing Co., Inc.
Troy Sunshade Co.
Westinghouse Electric Corp.
Youngstown Kitchens, by Mullins

YOUR OWN FINISH FROM YOUR OWN SOURCE!



Only Sprayon can give you factory quality touch up every time! Adopted by industrial leaders from coast to coast, the custom-loaded Sprayon Self-Spraying Touch Up Tool ends your touch up problems! We go right to your source for your own touch up finish. Exclusive Sprayon design features mean even unskilled help do a factory-perfect job in *minutes*. Use it anywhere—from your own production line to the final customer. Nothing else to buy—it's a disposable low-cost, constant pressure spray gun—a complete paint shop in a can!



SPRAYON PRODUCTS, INC.
2073 E. 65th ST. • CLEVELAND 3, OHIO

SPRAYON *Self Spraying* TOUCH UP TOOL

WRITE TODAY FOR YOUR FREE "PUSH-BUTTON" FOLDER

LOWEST "Per Unit Production" FINISH BAKING COST

Only Fostoria Has THE KEY

MOST EFFICIENT OF ALL FINISH BAKING OVENS

Typical of many thousands of cost-saving Fostoria installations is the oven pictured above at the Tropic-Aire Co. (Div. McGraw Electric). This oven is used to bake gloss white and various color wrinkle-type finishes on electric heaters, roasters, roaster cabinets, etc. The oven is double switched to provide variations for different type finishes. ***Baking time for both type finishes is 10 minutes.*** Another Fostoria oven handles burn-off of oils and compounds in 3 to 4 minutes. Both ovens are ceiling mounted, saving considerable floor space.

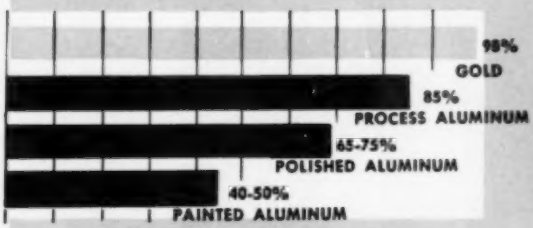
SEND FOR COMPLETE FACTS — Write for this brochure of technical facts on Infra-red with case histories of many installations. Tell us about your particular problem and we will include data directly applicable to your operations.

THE FOSTORIA

it — GOLDEN WALL-EVENRAY REFLECTION

VITAL TO INFRA-RED EFFICIENCY

Everywhere, finishing departments are cutting costs, speeding production, saving floor space, saving manhours by modernizing with Fostoria Infra-red ovens. No other method of heating is so amazingly fast, so easily controlled, so highly efficient. Like the sun, Infra-red lamps radiate electro-magnetic rays which create heat instantly *when directed upon any object.* Fostoria Golden Wall-Evenray reflection is the vital key which *directs, reflects and redirects* these Infra-red rays *uniformly* with the *highest productive utilization of energy.* Only Fostoria has it! The result is finer finishes, faster production and particularly lower "per unit" baking cost than with any other oven.



GOLD PLATED OVEN WALLS

Gold is by far the best reflector of Infra-red rays, 98% efficient. There is practically no energy loss through the gold plated Fostoria oven walls. Use of any other reflecting surfaces would absorb and waste from 15% to over 50% of all Infra-red rays. (See chart.) Obviously, the KW consumption per unit production is much less with a Fostoria oven.

EVENRAY REFLECTORS

Fostoria gold plated reflectors are scientifically designed to *direct and uniformly distribute* energy on the product being processed. This is vital. There are no hot spots. Whatever the critical temperature of the finish is, Fostoria ovens produce the temperature *evenly* over the whole product surface. Only Fostoria has it.

- **Highest productive utilization of energy — lowest energy loss**
- **Uniform heat distribution to all product surfaces**
- **Instantaneous heat, instantly controlled — no stand-by time — no overheating**
- **Lowest unit production cost and finest, most durable finishes**
- **Listed by Underwriters' Laboratories, Inc.**

INFRA-RED fostoria OVENS

PRESSED STEEL CORPORATION, Fostoria, Ohio

Oldest and Largest Manufacturers of Industrial Infra-red Ovens

Exit of power washer where hanging fixtures are automatically tilted as they travel past a horizontal bicycle wheel. Tilting them drains off any entrapped cleaner liquid or rinse water. Shorter lengths, which do not require being tilted to drain, pass over the wheel.

Fluorescent Lighting Fixtures

BY L. J. ROZIER
Sales Promotion Manager
Day-Brite Lighting, Inc.

Power washer, phosphating treatment, rinse, dry-off oven; spray painting a heated white enamel and baking the enamel at 310° F. heat for 17 minutes.

SINCE fluorescent lamps are lower in brightness and much greater in area than incandescent lamps, the fixtures must be larger and incorporate greater areas of reflecting surfaces. Naturally, while white enamel is the obvious material to use for this purpose, it is essential that we have good adhesion, and that the enamel remain white for the life of the fixture. In other words, there must be no yellowing or discoloration of the paint film.

Of course, formulation of the enamel plays a most important part in both adhesion and color retention. However, metal cleaning and surface preparation, correct application methods and uniform baking are equally important in maintaining these specific requirements.

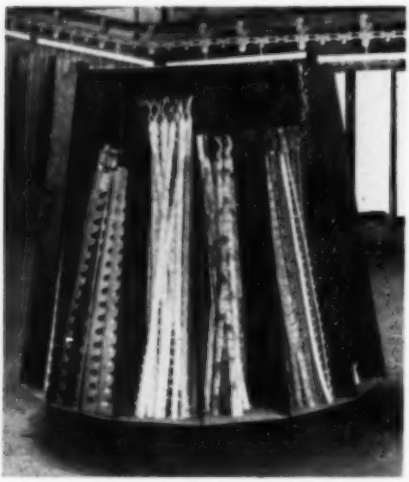
[*Continued on page 58*]

Notice the paint heater back of operator. Short material hose means less loss of heat between material heater and the spray gun.

Formulation is taken care of adequately by our supplier of finish materials. Our responsibility is to see that other factors are consistently controlled to produce satisfactory results. To do this we have established the procedure described in this article.

Conveyor Hanging Fixtures To and From Portable Bins

Fixture parts are hung on the overhead monorail conveyor which has hooks spaced alternately on 3-ft. and 2-ft. centers. The conveyor,



Revolving metal bin, mounted on square castered base, holds a dozen different sizes and types of conveyor racks used for holding parts in proper position for spray painting.

driven through a variable-speed drive, travels at the rate of 4½-ft. per minute. Because of the various sizes and shapes of fixture parts, many different types of hooks are required to hold them in proper position for spray painting.

To expedite loading of parts on the conveyor, to keep various sizes and types of racks separated, and to keep the finishing room neat and reasonably clean in appearance, we use a multiple compartment revolving bin rack with tapered sides; this bin is mounted on ballbearing rubber tired, swivel casters. The metal bin section can be revolved independently of the square base which is mounted on swivel casters. Unloading and loading stations are located fairly close together so that the rack bin can be placed between the two, where it is within easy reach of the workmen who remove parts and those who load parts.

Parts Tilted Automatically to Drain Entrapped Cleaner

Fixture parts go through the power washer where a phosphating solution is sprayed on at a temperature of 155° F.; this is followed by a hot water rinse at 170° F. After leaving the washer, to facilitate drying of some of the longer fixtures, we have mounted a rubber-tired bicycle wheel in a horizontal position so that as the long length fixtures (hanging straight down) leave the washer by conveyor an area near their lower ends makes contact with the rim of this wheel. The wheel revolves as the fixture passes along, and this movement deflects the fixture to a tilted position and drains the entrapped cleaner or rinse water along its lower edge. This is a simple arrangement but it serves our purpose quite well.

The cleaned parts are dried in a gas-fired circulating-air dry-off oven for four minutes at 350° F.

[*Continued on page 60*]

Products of DISTINCTION are Distinguished by their Finishes

SYNTHETICS
•
VARNISHES
•
LACQUERS
•
ENAMELS

EGYPTIAN
INDUSTRIAL FINISHES

Price-wise, design-wise and mechanically you know your product is as good, possibly better, than any in its field ... but have you considered the part a distinctive finish plays to fix this fact in the minds of your customers ... past experience has taught them "Products of Distinction are Distinguished by their Finishes."

Utilize the highly specialized finishing knowledge of your Egyptian Finishes Specialist and the creative Egyptian Laboratory Technicians behind him, to develop a distinctive finish for your product ... and remember ... Egyptian assistance does not end here ... Your Egyptian Specialist can keep you constantly informed of new finishing techniques and how you can benefit by them ... he can point out the advantages of the dip, spray, roller coat, tumble, hot spray or electrostatic application methods ... tell you the specifications for finishing any Government product ... help break finishing bottle-necks in your plant ... often his suggestions result in reduced overall finishing costs.

Invite an Egyptian Industrial Finishes Specialist to call on you today.

The EGYPTIAN LACQUER MANUFACTURING CO.

BOX 444, NEWARK 1, NEW JERSEY

Plants: South Kearny, N. J. • Lafayette, Ind.

Heated White Enamel is Sprayed and Baked

Upon leaving the dry-off oven the lighting fixture parts travel for six minutes to cool before they enter the double reverse, water-curtain spray booths. In the first booth an operator sprays one side of the fixtures and in the next booth the other side is coated. White enamel at a viscosity of 31-seconds at 78° F., as measured in a No. 4 Ford cup, is run through a paint heater maintained at 185° F., and is then sprayed on to produce a smooth coating of uniform thickness.

The atomizing pressure used is 50-lbs.; the fluid pressure, 20-lbs. Parts travel about 25-ft. to provide a flash (air drying) period of five minutes before they enter a gas-fired convection oven where the white enamel is baked for 17 minutes at 310° F.

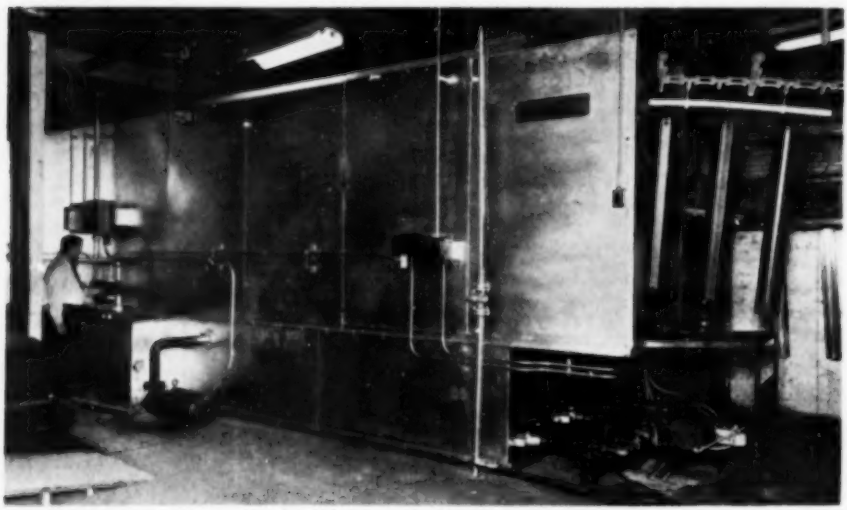
Enamel is supplied to the spray booths from a central paint supply room by means of a circulating system. In this fireproof room we have one 60-gallon and one 30-gallon tank containing white enamel, and one 30-gallon tank for aluminum enamel.

Iridite Line at Finishing Show

The complete line of Iridite finishes for zinc, cadmium, aluminum, copper, brass and bronze and ARP Plating Chemicals will be exhibited at Booth S-19 & 20 at the Industrial Finishing Exposition by the manufacturer, Allied Research Products, Inc., Baltimore, Md. The show is scheduled for Chicago International Amphitheatre, June 16-20.

The Allied exhibit will feature both photographic and schematic illustrations showing how the Iridite coatings provide protection from corrosion, paint adherence and decorative finishes. In addition, many actual samples of various parts and metals finished with Iridite will be on display.

Members of the Allied Research sales and research staffs will be on hand to discuss Iridite applications with visitors.



Here you see fixture parts, hanging from overhead conveyor, entering power washer wherein their surfaces are cleaned before being painted. Photograph, courtesy of The Spra-Con Co.

FREE!

Guide to industrial uses of Sundstrand Air Sanders

How to save time and money on maintenance, production

See how leading manufacturers use *Straight-Line Action* Sundstrand Air Sanders for all types of finishing operations on wood, metal, or plastics. Find out how you can duplicate hand sanding with this pioneer air sander which moves the pads back and forth instead of in a circle . . . leaves no swirls, no scratches, no pressure marks. Learn how you can use faster-cutting, coarser grit paper to reduce sanding time . . . how one machine sands wet or dry . . . on flat or curved surfaces . . . even along side moldings and in tight corners. Here are just a few of the uses pictured:

- **Sanding filler on castings**
- **Preparing metal for priming and final finish**
- **Sanding plastics**
- **Wet sanding base coat on wallboard**
- **De-burring rivet holes on aircraft**
- **Polishing dies**
- **Refinishing boats, desks, work benches**
- **Sanding and rubbing fine furniture**

Act now! Contact your local supplier or write for Bulletin IF5.

SUNDSTRAND

SUNDSTRAND AIR SANDERS

SUNDSTRAND MACHINE TOOL CO.

PNEUMATIC DIVISION, ROCKFORD, ILLINOIS

HOW TO GET MORE OUT OF

Spray Guns

IN THESE DAYS of increasing costs — with so many plants approaching the "break even point"—it is up to management to investigate every possible and practical means of saving cost dollars through the elimination or reduction of waste.

Let's consider an average size plant that is producing finished products, as an example. There are thousands of them. It would be interesting to know how many of these plants have a man who is thoroughly versed in the correct technique of spray painting. Let's put these questions to the man in charge of product painting or finishing:

1) Is the right spray gun being used for every job?

2) Is the correct size fluid tip, needle and proper air cap used?

3) Is anyone charged with inspection, cleaning and repairs of spray guns?

4) Is spray pattern correct for the regular and any special jobs?

5) Are the atomizing and fluid pressures correct for applying the finishing material being used?

6) Is viscosity of the material correctly established, checked at regular intervals and accurately maintained?

7) Has each spray operator been instructed in the correct technique of spray finishing, regardless of his length of service?

8) Are properly conditioned extra guns and spare parts kept available for instant use if or when emergencies arise? [*To page 64*]

here's how Nacromer
A PEARLY PIGMENT
is being used by Casket Manufacturers
In the production of caskets, Nacromer is used to provide a lustrous, pearly, durable finish to the wood and a simulated metal effect to the hardware. Nacromer provides a brilliance almost comparable to natural pearl essence at a fraction of the cost.
Increase the eye appeal of your products with Nacromer. Write today for details and working sample.
THE MEARL CORPORATION
153 Waverly Place New York 3, N. Y.
"World's Largest Producers of Pearl Essence"

If the answers are "yes" to all eight questions, then spraying performance in this plant is probably close to perfect — certainly much more efficient and less wasteful than one finds in many other factories. Let us return to the questions.

Select and Use Right Type of Gun for Job

Spray guns are designed and made to work perfectly in every respect—but the proper type of gun must be selected and used on the kinds of work for which it was intended. Each spray gun must be kept in proper adjustment and fitted with the right kind of parts; and it needs to be cleaned when changing from one material to another, and at the end of each day that it is in service.

The wrong gun for any job can be responsible for wasting many dollars worth of finishing material; it can be the cause of an excessive number of rejects and can be responsible for unnecessary waste in overspray. To apply a quality finish economically requires an expert spray operator handling the right type of spray gun equipped with the proper size of fluid tip, needle and air cap.

Adjustment; Frequent Cleaning; Shape of Spray Pattern

Spray guns should be handled carefully, adjusted correctly and cleaned at regular intervals—certainly once each day—and inspected and repaired, if necessary, once each week. Faulty spray guns may produce improper spray patterns and cause rejects; in fact they may even cause a halt in production.

Care should be used in selecting the right width of spray pattern for the job at hand. There is a correct shape or pattern for each type of work. Too large a pattern wastes paint; too small a pattern wastes time and retards the work.

Air Pressure for Spraying; Viscosity of Material

There is a logical balance between atomizing pressure and fluid pressure, based upon the viscosity or consistency of the material being sprayed. This balance should be established and it should be maintained at all times. And just in case it may be forgotten, temperature of the material will make a difference, whether it is during exceptionally cold weather with a chilled finishing department on one hand, or if a paint heater is put in the line on the other hand.

Viscosity of the finishing material being sprayed is highly important. A viscosimeter or a viscosity cup costs very little. Suppliers of finishing materials are, as a rule, reliable and eager to supply the materials specified; however, they are not infallible. Likewise the employee who adds thinner and mixes the material may be a conscientious, experienced person, yet he is not infallible. Once a standard viscosity has been established a viscosimeter can be used to detect any variations, regardless of cause.

Technique of Spraying; Where to Learn it

Finally, there is one right method of spraying for each type of product. Generally the actual spraying technique is the same in each case

HOT Lacquer NEWS

PUBLISHED PERIODICALLY BY HERCULES POWDER COMPANY IN THE INTERESTS OF BETTER FINISHES AND FINISHING

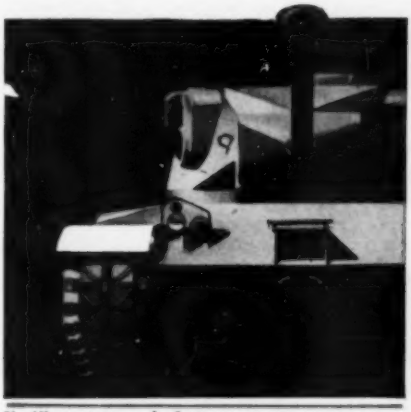
New Ford Plant to Use Hot Lacquer For Finishing Army Tanks

Hot-Spray Process Avoids Installation of Baking Ovens in Ford's Livonia, Mich., Assembly Plant

The decision of Ford's Tank Division to use hot-spray lacquer exclusively for finishing tanks at its new Livonia, Michigan, plant points up, once again, the advantages offered by this time-saving and money-saving process. This fast-drying system, developed by The Ordnance Corps., includes a new nitrocellulose base primer, MIL-P-11414 (ORD).

The enthusiastic switch to hot lacquer in defense and other industries stems from the following reasons:

- finishing time is cut by as much as 50%
- expensive baking equipment is unnecessary
- Every pass of the spray gun assures more solids . . . greater thickness
- fewer coats are needed
- less solvent is used
- coverage per gallon is increased
- finish has better flowout
- blushing is eliminated



You'll want to read about the broader uses of lacquer for finishing defense items—and your own products. New military specifications for lacquer and primer are now issued and official. Identified as "Military Specification MIL-L-11195 (ORD) Lacquer, Lustreless, Hot-Spray (For Ammunition)" and "MIL-P Primer, Lacquer, rust inhibiting." Hercules will send you full information on hot lacquer, types of heating equipment available, and the performance record of hot lacquer in many industries. Send for it today.

HERCULES POWDER COMPANY
INCORPORATED
Cellulose Products Department
928 Market Street, Wilmington 99, Delaware

CL52-2

but the series of motions, starting and stopping paint spray, may vary. Proper stroking of the spray reduces the operator's expended energy to a minimum. Most spray operators are eager to learn an easier, faster and more economical method of spray painting, provided they have faith in the ability and knowledge of their instructor.

Now the question may naturally arise, how do we go about approaching this state of perfection? Well, as a rule, the plant superintendent is out, for he has raw materials, fabrication, production, mechanical and personnel problems on his mind besides finishing.

This leaves it up to the finishing foreman. He is the logical man for this job of supervising the principles and details of spray work. He may be young or old; he may be highly experienced or just learning as he goes along. Regardless of his age, knowledge or experience, a course in one of the schools for spray finishers will be very helpful; it will pay big dividends to both the foreman and to his company.

If the foreman is new in this line of work, attendance at a spray painting school will give him factual information that he needs. If he is experienced, this instruction will augment his knowledge. He will lear new techniques, methods, practices. Some of the instruction may be old stuff to him, but it is safe to say that its presentation in the general program will prove enlightening and refreshing.

These spray painting schools are conducted at stated intervals by spray gun manufacturers in Chicago, Illinois and Toledo, Ohio. Considering the continuing benefits of real knowledge acquired, the expense for one week at one of these schools is relatively cheap. Most foremen would welcome the opportunity to learn more about their jobs—and the savings that can be effected will more than offset cost.

Binks Opens New Branch in Dallas, Texas

Binks Mfg. Co., manufacturer of professional spray finishing equipment, announces the opening of a new branch sales office and warehouse at 1209 Levee St., in the Trinity Industrial section of Dallas, Texas. This new branch will serve as a district sales office and warehouse for the distribution of Binks products. By maintaining an adequate stock of equipment in Dallas, prompt shipments can be made throughout the entire Southwest Territory—Texas, Louisiana, Oklahoma and Arkansas—without waiting for deliveries from the Chicago plant.

The new quarters provide 6750-sq.ft. of office and warehouse space. The building is served by a railroad siding. Truck-height loading facilities will speed up deliveries and shipments.

The new branch is managed by George Cook, who has had many years of factory training and actual field selling experience with the Binks Company. E. A. Preston will serve the Dallas territory as sales engineer.

Jobber sales throughout the Southwest will be handled by the Hersig-Frazier Co., 4333 Belmont Ave., Dallas, Texas, whose six trained salesmen are constantly making the rounds of the territory.

Front of Binks' Dallas, Texas, branch sales office and warehouse at 1209 Levee Street.

What COLOR means to CATERPILLAR!

Caterpillar DW21 Tractor and Scraper in workout at proving grounds of Caterpillar near East Peoria, Illinois. An R-M enamel has to be good to stand up here!

R-M Yellow works 4 ways for Powerful Road Builders

It is no mere chance that Caterpillar equipment is finished in bright, bold and durable R-M Yellow enamel. To be specific, R-M Yellow performs 4 different tasks for these hard working road builders: 1. As a *very durable enamel,* it prolongs product life; 2. as a *highly visible color,* it helps prevent accidents; 3. as a *bright color,* it draws the eye to Caterpillar equipment; and 4. as *a consistent color,* it promotes equipment sales through easier identification with the product name. R-M lacquers, enamels and undercoats are used on the finest passenger cars in America, on hard working farm and earth-moving equipment, on giant Diesel locomotives and many others. Ask us how an R-M color *can go to work for your product!*

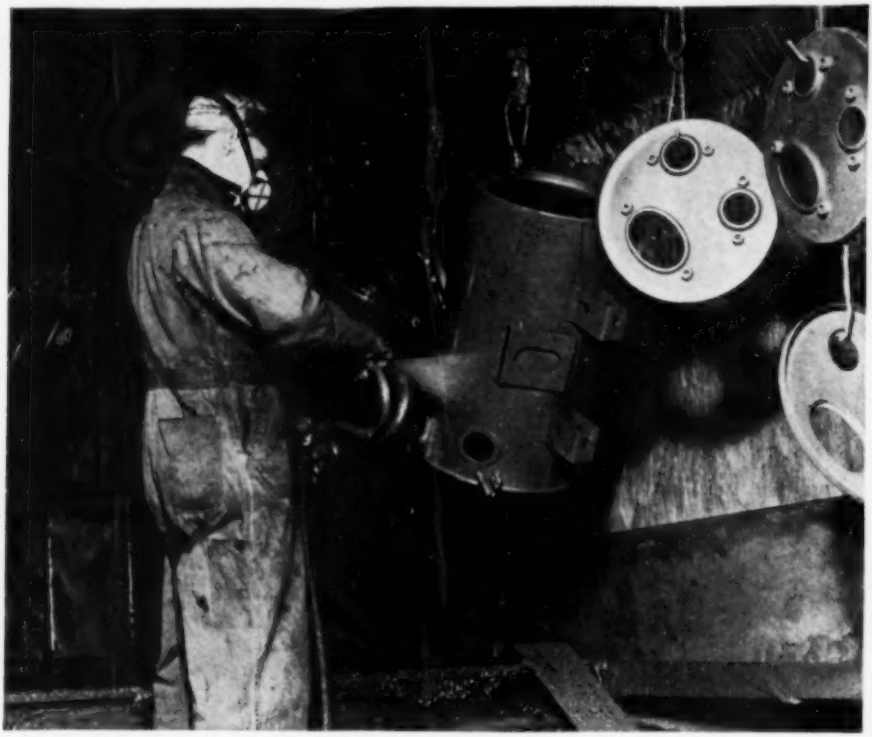
Write for booklet on U.S. Government Specification Finishes

R-M
REG. U.S. PAT. OFF.

RINSHED-MASON CO.

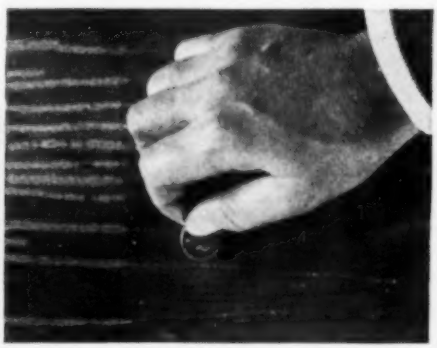
Manufacturers of fine lacquers, enamels and undercoats for leading products of industry.

5935 MILFORD AVE... DETROIT 10, MICH.
1244 N. LEMON ST.... ANAHEIM, CALIF.



WHETHER THE WEATHERMAN brings snow and ice or a scorching summer sun, these step-down transformers will be protected over the years. They're being sprayed with a heavy-duty DULUX finish scientifically formulated to stand up to outdoor exposure.

EYE-CATCHING Du Pont DULUX Enamels on porch and lawn metal furniture promote showroom sales, stay smart for years.



DUCO Penetrating Primer gives lacquer-finished wood furniture added scratch resistance, as right side of test panel shows.

Preparing Transformers for 20 Years Outdoors

It takes a rugged finish to keep a transformer looking good after 20 years on a telegraph pole. But it is not unusual for this special Du Pont DULUX finish to do just that.

A leading manufacturer of step-down transformers needed a finish that would provide outdoor protection and good looks over a long span of years. So Du Pont chemists developed a special finish formula containing the famous DULUX vehicle —a finish that takes hard knocks during installation and servicing of the transformers, a finish that resists sudden temperature changes without blistering and cracking, a finish that stays uniform in color year in and year out whether in sun or shade. It has been an important factor to utility companies in keeping up appearance and keeping maintenance costs down.

This is one of more than 12,000 Du Pont finish formulas now serving industry. If you're seeking a way to cut maintenance costs—or to make a product look better, wear better, sell better—contact the Du Pont sales technician in your area . . . or write E. I. du Pont de Nemours & Co. (Inc.), Finishes Division, Wilmington, Delaware.

Du Pont Industrial Finishes

Chemically engineered to do the job *better*

DU PONT
REG. U. S. PAT. OFF.
150th Anniversary
Better Things for Better Living
...through Chemistry

DUCO AND DULUX ARE REG. U. S. PAT. OFF.

New Mearl Corp. Laboratory at Peekskill, N.Y.

The Mearl Corporation, New York City, has put up a new 2-story laboratory building, 50x150-ft., at Peekskill, N. Y. The top story is occupied by individual laboratories, each laboratory being capable of supporting two chemists and an assistant. Provisions are being made for 24 chemists to work on the upper floor.

The lower part of the two-story building will be divided up into what is known as technical development laboratories and will haye many facilities, both for compounding and using pearl essence in different industrial fields. One room, for example, will have a spraying department and special coating applicators, such as roller coating, etc. The whole layout will be such that the company can put into practical development use, any information it picks up in the laboratories upstairs.

The back part of the building will be used for pilot plant development of the various nacreous pigments. In addition to its natural pearl essence, and its Nacromer, the company also manufactures three other nacreous pigments which are used at present only in the plastics industry; but the firm expects to introduce them into the coating industry.

The Mearl Corp. is also undertaking some fundamental research work in other fields and will have in its laboratory physicists, biologists, botanists, etc., in addition to its chemical force. There will be no direct service work at this laboratory, as that will be continued in the New York City laboratory. This building will be entirely devoted to research purposes. With this isolation from the commercial activities of the company, some results of extreme benefit and usefulness to the industry will probably come about.

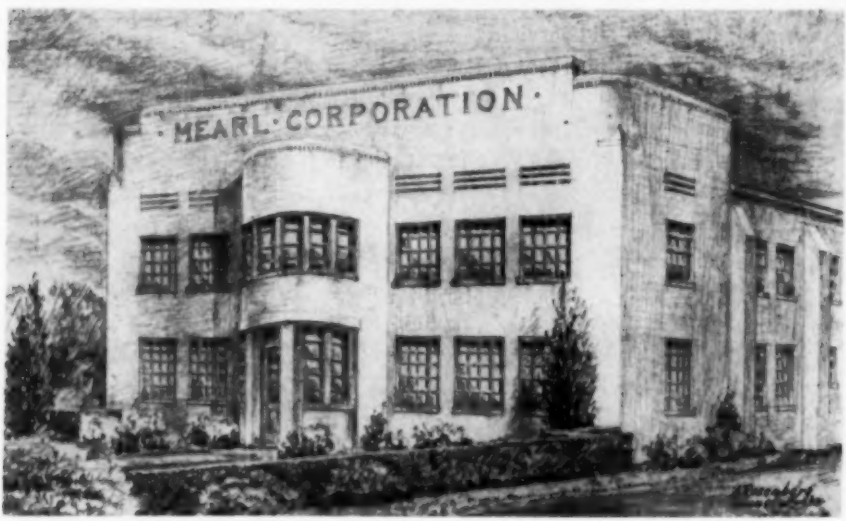
European Survey Trip Planned By G. R. Varnish Corp.

Joseph A. Hager, Vice-President of the Grand Rapids Varnish Corporation, has announced plans for an extensive European tour to study furniture finishes and methods used in foreign countries. Purpose of the tour is to gain additional ideas for use in finishing top quality American-made furniture.

Accompanying Mr. Hager will be Dan Buckle who has been affiliated with the Grand Rapids Varnish Corporation for the last eight years as head of the market research department, carrying on continuous surveys of furniture finish styles and trends at the retail level.

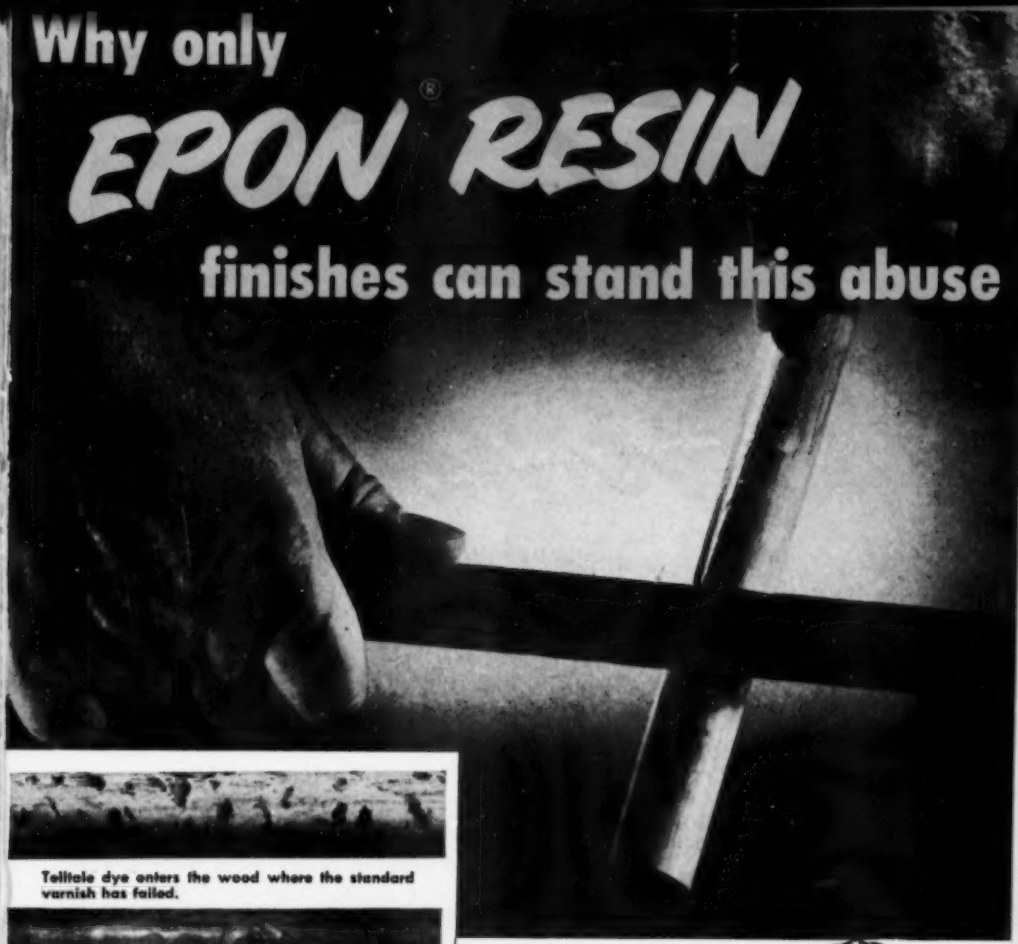
Goldstein Advanced by Midland Industrial Finishes Co.

Mr. Eugene V. Goldstein has been appointed Research Group leader at Midland Industrial Finishes Co., manufacturer of enamels, synthetics, lacquers and varnishes, Waukegan, Ill., according to an announcement by Mr. M. A. Glaser, Vice President and Technical Director of the Company.

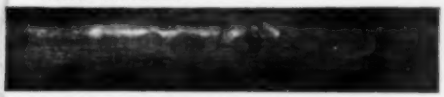


Front of the Mearl Corporation's new laboratory building (50x150-ft.) in Peekskill, N. Y.

Why only EPON® RESIN finishes can stand this abuse



Telltale dye enters the wood where the standard varnish has failed.



The Epon resin finish flexes and remains not only unbroken, but even uncracked.

You can easily make this simple dowel test yourself!

The Set-Up. Coat two hardwood dowels with a standard brand of varnish. Coat another pair with an Epon resin-based finish. Age them, if you wish, to develop the maximum brittleness. Now strike them together, just as hard as you can. When you have done your worst, rub a "telltale" dye over the surfaces.

The Result. The standard varnish cracks and flakes . . . as emphasized by the dye penetration into the wood. The Epon resin finish *follows the dented surface without any sign of chipping, flaking or dye penetration.*

The Reason: The Epon Resin molecule is an entirely new class of polymer with evenly spaced reactive groups which permit it to cure to a flexible film. Also, its polar nature contributes outstanding adhesion. As a plus value, Epon resins have excellent resistance to detergents, caustic and many acids.

Write to your nearest Shell Chemical office for more information and samples.

SHELL CHEMICAL CORPORATION

CHEMICAL PARTNER OF INDUSTRY AND AGRICULTURE

EASTERN DIVISION:
500 Fifth Avenue, New York 36

WESTERN DIVISION:
100 Bush Street, San Francisco 6

Los Angeles • Houston • St. Louis • Chicago
Cleveland • Boston • Detroit • Newark • Atlanta

IN CANADA
Shell Oil Company of Canada, Limited
Toronto • Montreal • Vancouver

Let's Cut Your Cost of Patching

BY HERMAN HARDESTY

THERE is a tendency with everyone to put off an unpleasant job until it must be done. This is a natural condition, but in some cases it creates a very expensive and unsatisfactory situation. One of these examples is the patching of furniture and cabinets.

Patching is usually thought of as part of the finishing operations, but technically it is an important part of every major operation in fine woodwork. Really a patching station should be set up in each department to take care of the defects and damages. Many pieces of millwork can be saved by a wood filler (crack filler) applied at the proper time, and many times this should be done before assembly. After assembly the "mudding" operation should be as thorough as the polishing or final sanding. When a case enters the finishing room it should be as free from defects as it can possibly be.

Make More Repairs in Your Cabinet Room

Repairs in the cabinet room can be made in many ways, with a wide range of materials, but because of these many materials—some good and some bad—a number of furniture men are hesitant about attempting to do any patching or repair work on a cabinet or piece of furniture before it enters the finishing room because of the doubtful final outcome of the repairs through the use of improper materials and careless workmanship.

It should be kept in mind that the patching or repair materials have kept pace in the development field and have advanced in practicability and workability as much as coating materials. As an exam-

Just as it takes "know how" to conduct large symphonies so does it take "know how" to solve difficult finishing problems. We at Reliance have this priceless ingredient gained through 30 years experience in meeting the demands of our customers. This accumulated knowledge is the bonus that is automatically included in every Reliance product. We would welcome the opportunity to put these resources to work for you. If you have a finishing problem feel free to consult us without obligation.

Address 4732 Crittenden Drive, Louisville, Ky.

ple, there are materials available today in the form of, we will say, wood fillers (crack and nail hole fillers) or a coarse ground filling material that has a shrinkage of less than 1%. There is no swelling after it is dry. These materials will take stain in about the same proportion that wood takes it. The main problem for the foreman is to match the white wood color, follow the manufacturer's instructions and, of course, see that someone applies it correctly.

Most of the manufacturers of wood fillers produce surfacing putties for small dents and scratches that are far superior to any that were available a few years ago. These putties have the same characteristics as the wood fillers previously mentioned and can be used safely without causing extra work in the finishing room, and without fear of the material falling out some place along the line.

Burn-in Repairs in the White—and Later

Those cabinet men who prefer the "burn-in" repairs in the white wood have learned to match the finish color with the material used to make the patch. Here again modern burn-in materials have advanced to the point where workable materials are available that do not swell when finishing materials are applied over them, and they will not pull out when sanded.

For finish patching the same type of burn-in materials may be used —in fact, should be—either on sealer or first coat finish (if two coats or more are used). By burning-in here, the patch will have a coat or two of finish material over it. The patcher has only to use a material of the correct color, and finish the patch level. There is no need to worry about the sheen on this operation when it is done in the proper place. The same holds true with color patches.

It all boils down to this: *Do all of the patching as far back in the procedures as is possible from final inspection. The earlier this is done, the simpler and less expensive it is. The "mudding" in the mill and cabinet rooms requires no great skill and the procedures are fast.*

Where You Can Really Save—and Why

Burning-in in the white wood requires but little experience, but as the need for a burning-in repair progresses into the finishing room, more skill is required and more time will be consumed to do the patching. With that skill comes a substantial increase in pay rates, and the whole result means a tremendous increase in repair costs.

Many of the complaints about the lack of skillful finish patchers and the high cost of patching can be eliminated by simply doing that repair work where it is the easiest and least expensive to do, and that place is at the first patching station after the defect is discovered.

Bruce Hogarth Represents Mich. Oven Co. in Philadelphia

Michigan Oven Co., Detroit, Michigan, has appointed Bruce Hogarth, St. Davids, Pennsylvania, as its representative for the Philadelphia area. Since graduating from Duke University, College of Engineering, Mr. Hogarth has been associated for the past eight years with prominent oven and engineering companies.

In PLANT after PLANT — DeBURGH COMPLETE SYSTEMS CUT COSTS...BOOST PRODUCTION!

Engineered and Built by KOCH

- **OFFER LABOR SAVINGS UP TO 50%**
- **PATENTED "CLOSE-PACK" FEATURE**

With the DeBurgh Conveyor you can do inspection, white sanding, putty work, spraying, wiping, drying, sanding, striping, decorating, shading, glazing, rubbing, attaching hardware, wrapping, touch up work and packing all on one conveyor.

No danger of dirt falling from overhead conveyors. No lateral sway or pendulous movement. No lifting or pushing heavy pieces.

The DeBurgh Conveyor System is specially designed for the furniture industry. It gives from 100% to 300% increased production and usually effects labor savings in excess of 50%. Ask us to show you what it can do for your finishing department.

Phone, Wire or Write Today!

GEORGE KOCH SONS, INC.

EVANSVILLE, INDIANA

Use Tack Rags Wiping Off Dust

REGARDLESS of what material a product is made of — whether metal, wood, plastic or leather—if it receives a finish coating, and if one or more wiping operations are performed, tack rags should be used in preference to ordinary wiping rags. Tack rags are especially desirable after any sanding operation, either wet or dry sanding.

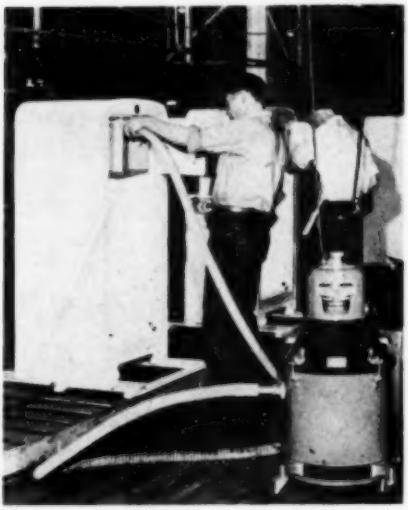
Much emphasis is placed on filtered air for finishing rooms or booth enclosures. It seems almost absurd to go to the expense and trouble of installing a make-up air system, filters and heaters, with metal and glass enclosed spray booths, and then wipe the surfaces of the product with ordinary rags after sanding the primer or sealer coats.

Ordinary wiping rags allow dust particles to scatter, to be picked up by air currents and blown around to finally settle on freshly coated work. Tack rags on the other hand, absorb the dust particle and hold them. Tack rags cost a little more than ordinary rags, but they are worth more.—*J.J.*

Vacuum Cleaning On Assembly Line

THE Seeger Refrigerator Co., St. Paul, Minn., uses an industrial vacuum cleaner on its refrigerator assembly lines, for cleaning dirt and loose insulation fibers from the boxes incident to their manufacture. The Multi-Clean vacuum cleaner operates for long periods of time without becoming over-heated or having to be cleaned frequently.

Two of these vacuum cleaners have been operating on the Seeger lines for over a year, and according to the plant engineer, they have cut labor time and costs by 50%. They are in operation continually for two shifts, 16 hours a day, seven days a week.



Cleaning refrigerators by vacuum cleaner.

Features that make the vacuum so adaptable to this work are its sealed motor with independent impeller for high cooling efficiency, and an abundance of power for thorough pickup. It is easily and quickly cleaned and offers simplicity in its over-all care and operation. Being portable it can be used around the assemply lines or anywhere in the plant.—*H.C.W.*

Body Engineers Convention

The American Society of Body Engineers have formulated plans for their Seventh Annual Technical Convention to be held at the Rackham Memorial Building, 100 Farnsworth Avenue, Detroit 2, Michigan, on Wednesday, Thursday and Friday, October 29th, 30th and 31st, 1952.

There will be eight technical sessions in the Engineering Society of Detroit Auditorium directed by outstanding speakers and engineers in the Automotive Industry, who will bring the latest developments and trends in Auto Body Styling, Materials and Production Engineering.

Rich, Super Satin Finishes

THE GILBERT SPRUANCE CO.

Philadelphia 34, Pa. Winston-Salem, N. C.

FRENCH PROVINCIAL FINISH

The Gilbert Spruance Company designed and created the quality materials for the finish of the chest illustrated. It is a part of a suite which was the sensation of the furniture show, and proved the "conversation piece" of that occasion.

We consider ourselves an actual part of the furniture industry, and have always been leaders in the designing of new and distinctive furniture finishes.

Among our customers are some of the largest and most successful furniture manufacturers in the East and South.

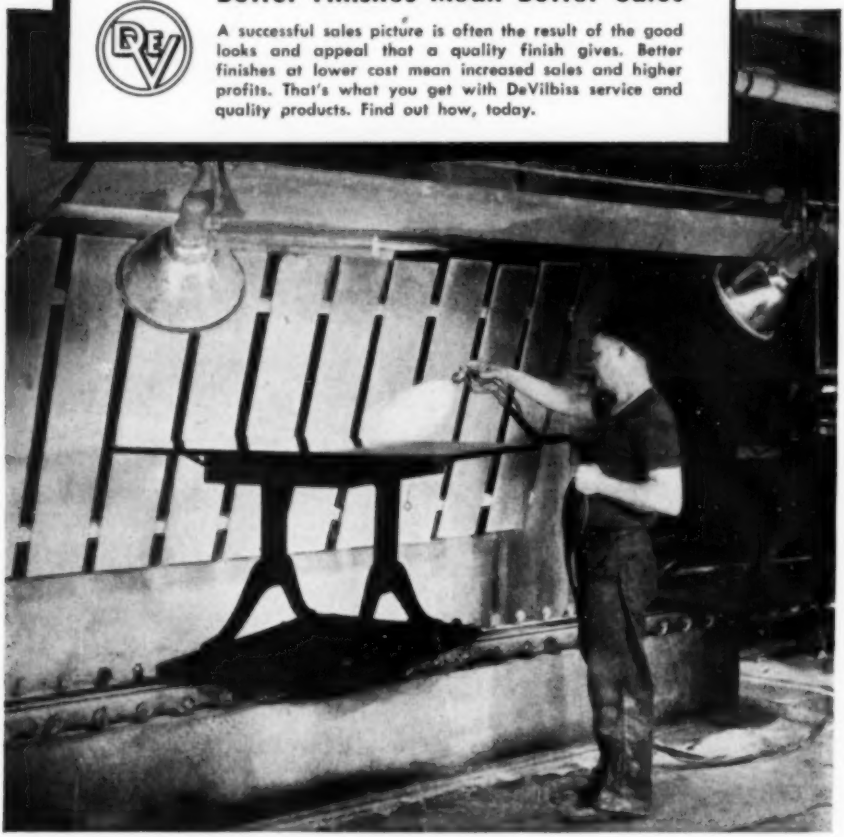
May we collaborate with you in devising the finishes you require? Our laboratory is at your service.

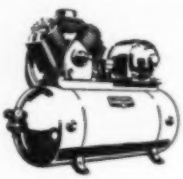
Courtesy of
B. F. HUNTLEY FURNITURE CO.
WINSTON-SALEM, N. C.

Our long experience — is at your disposal.

Better Finishes Mean Better Sales

A successful sales picture is often the result of the good looks and appeal that a quality finish gives. Better finishes at lower cost mean increased sales and higher profits. That's what you get with DeVilbiss service and quality products. Find out how, today.





Air Compressors

Hose and Connections

Spray Guns

Furniture sales start with the finish!

For years, manufacturers of fine furniture have depended on DeVilbiss spray equipment to achieve the quality finish that complements excellent design and fine craftsmanship.

In this picture, the operator is using the new, lightweight DeVilbiss JGA spray gun to apply a second coat of lacquer. Only one pound, six ounces in weight, this gun makes furniture finishing—and all other finishing and painting jobs—quick and easy with all types of materials.

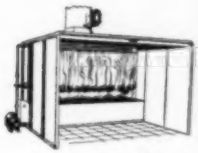
DeVilbiss floor-type booth exhausts fumes, overspray and vapor, and the safety-approved lights give scientific illumination. Dependable air and fluid flow is assured by the use of a DeVilbiss air transformer, hoses and paint pumps. A DeVilbiss air compressor completes this integrated spray system—all units balanced with one another for maximum efficiency.

Electrostatic, manual, automatic, steam or hot material — our broad experience covers *all* spray-finishing methods. Your nearest DeVilbiss supplier will be glad to give you complete data on the proper equipment for your spraying operations. Call him today, or write to us direct.

THE DEVILBISS COMPANY, Toledo, Ohio

Windsor, Ontario • London, England • Santa Clara, Calif.

Branch Offices in Principal Cities



Spray Booths

FOR BETTER SERVICE, BUY

DEVILBISS

Plated Effect Coatings

- NO DYES OR BRONZE POWDERS USED
- NON SETTLING — NON JELLING
- SUPERIOR ADHESION TO PRACTICALLY ALL SURFACES
- EXCELLENT LUSTRE & REFLECTIVITY.

ANOTHER NATIONAL EXCLUSIVE

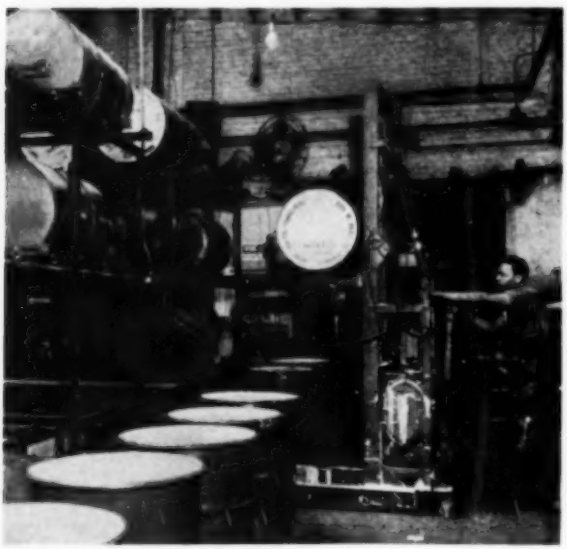
NATIONAL LACQUER & PAINT CO., INC.
7415 S. GREEN ST. • CHICAGO 21, ILL.

SEND FOR FREE BULLETIN

Multiple Deck Racks for Drums

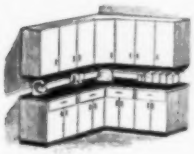
AN economical solution for the problem set up by having a larger volume of business and the current cost of new buildings, in a plant where paints, varnishes and lacquers are manufactured or used, is shown in the accompanying illustration. Drums of materials must be stored for future use. When there is no place but the floor for the drums, the plant soon becomes severely congested. Production is slowed down and numerous man-hours are spent moving drums around.

In one typical establishment decision was made to put the plant's overhead space to work. Steel storage racks for the four-high storage of drums were installed. The plant's present racks are located near the receiving dock for materials.



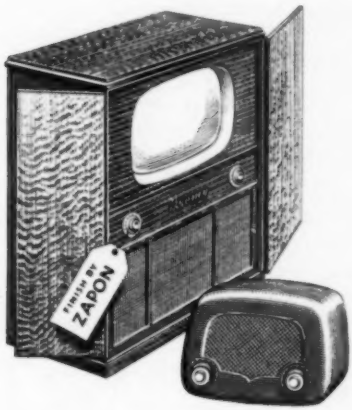
For placing paint drums in the racks with minimum physical effort, and their removal, a Barrett portable elevator is used, as shown in the picture.

As a result of this installation, the company's need - for - more - space problem has been solved, and at a small fraction of the cost of a new storage building which otherwise would have been needed. Much floor space has been "regained" for production. Output has continued to grow since the racks were installed, but there is not the congestion of the "old days."—*B,C,*



Cabinets—TV and otherwise

Attractive, durable finish is an asset for all kinds of cabinets—kitchen . . . TV . . . or radio. For that matter, good finishes are good business for all makers, sellers and buyers.



ZAPON

"SERVICE FROM EVERY ANGLE"

Metal, wood or plastic—name your product
and ZAPON will provide the right finish.
ZAPON Finishes are "custom-tailored" for the product.
And ZAPON "Service From Every Angle"
follows through on your production line . . .
helps you solve finishing problems.

ATLAS POWDER COMPANY • WILMINGTON 99, DELAWARE

for Industrial Finishes • Stamford, Conn. • North Chicago, Ill.

To Work on Silicone-Polished Finish

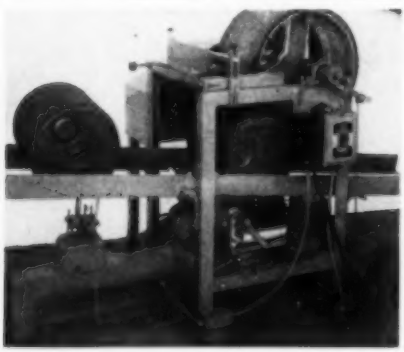
WHEN OR WHERE a finisher finds it necessary to do touching-up or repair finishing or partial refinishing on a finished surface that has been polished with a material containing silicone, he may have trouble unless he observes certain precautions. In this connection, we believe it will be of interest to many readers to quote instructions that appear on a bulletin issued by the manufacturer of a polish called "Tone" which contains silicone.

"The unusual properties of the silicone in 'Tone' make it imperative that these instructions be carefully followed when touching-up or refinishing a surface which has been Toned. Failure to follow these instructions will result in the most startling creeping effect imaginable at the moment that lacquer strikes the surface. The following procedure will insure a perfect job and, after the lacquer has been mixed, it does not involve any extra labor.

"1) Prepare the lacquer or other finishing material to be used for refinishing by adding ¼-fluid ounce of silicone to each gallon of finish. We can furnish the silicone measured for easy addition to gallon, 5-gallon or 55-gallon containers. The silicone will mix instantly. It is quite satisfactory to treat a quantity of finishing material and hold it in reserve for touch-up and refinishing as occasion may require.

"2) Clean the surface to be recoated in the same way you would remove an ordinary wax polish, using naphtha or mineral spirits to wash the area; then wipe the surface dry with clean cloths. Recoat the surface with the silicone-treated finish, as prepared above.

"Note: In a few instances, where an unusually fast-drying finish is used, we have found it necessary to add two or three ounces of retarder per gallon along with the silicone to get perfect results."



This new machine automatically prints whatever is desired on the round sides of 5-gallon drums and bail cans, at the rate of 26 cans per minute, using liquid ink in any color. It assures clear clean printing, only 15-seconds drying time, and the color printing is permanently waterproofed.

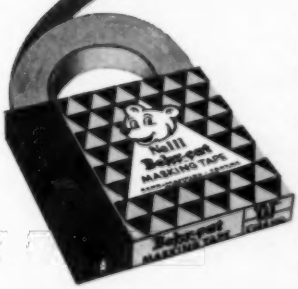
Managers of Laboratories for Standard-Toch Chemicals

Standard-Toch Chemicals, Inc., announces the appointment of John Ostock as Manager of Laboratories of its Eastern Div'sion, and R. G. Gohman as Manager of Laboratories of its Western Division.

John Ostock is a graduate of Polytechnic Institute of Brooklyn, N. Y., where he received his B.S. degree, and is a member of the American Chemical Society and the New York Paint Production Club. He has been associated with the organization for many years. Mr. Ostock, whose intensive field service over a period of years, supplemented by extensive research and development activities, has contributed many technical developments in specialized finishes over a wide field including insulation, metallizing and plastics.

R. G Gohman received his B.S. degree at Wabash College of Crawfordsville, Ind., and is a member of the American Chemical Society. His activities in the industry and with the organization extends over many years. He is responsible for many technical improvements in the application of paint and lacquer. His contribution in the field of research and development involving coatings for product finishing has been marked by many outstanding achievements.

Tape it with Behr-cat*



There's no better test for a masking tape than the one shown above. When you're in a tough spot, you want a tape that helps you do the job fast—and right—the first time. BEHR-CAT masking tape is first choice because it gets through hard jobs in jiffy time. It goes on easily with one pass of the finger and stays put until you're ready to strip it. Morever, when you flex it around curves, you'll find no trouble with torn edges. And because it's thin and strips clean, you'll find it produces a superior color separation job.

YOUR SPECIAL TAPE PROBLEM is welcomed at BEHR-MANNING. Our fully staffed laboratories are at your service. Put us to the test. Write today. Address Dept. IF-5

*Trade Mark

BEHR-MANNING

division of NORTON Company

▲ COATED ABRASIVES
▲ SHARPENING STONES
▲ PRESSURE-SENSITIVE TAPES

Main Office and Plant: Troy, N. Y.
For Export:
Norton Behr-Manning Overseas Inc.

IMMEDIATE DELIVERIES!!! We own and operate several trucks to provide immediate and safe delivery of finishing materials to customers throughout the southeastern states. Plane delivery also. This service means a lot when you're in urgent need of materials. TRY IT! Our line of top-quality finishes includes—

- LACQUERS
- SEALERS
- FILLERS
- TONERS
- GLAZES
- PIGMENTED WIPING STAINS
- NGR STAINS

Complete Technical Service At Your Disposal Also

Snyder
BROTHERS COMPANY

Manufacturers INDUSTRIAL *of Quality* LACQUERS

P. O. BOX 548 — TOCCOA, GEORGIA

Technique of Dipping

(Continued from page 29)

ness and excessive dripping (on drip pans or drain board) will result. If the withdrawal speed is slower than this rate of flow, a normal film thickness and minimum dripping will result, but production will be seriously reduced.

The viscosity of the material controls the rate of flow off the surface. For uniformity of film thickness, volume of production, and minimum dripping, the viscosity should be tested at regular intervals during the dipping operation, and solvents should be added when needed to maintain the established correct viscosity.

Two Technical Men Advanced by Sherwin-Williams

Two major appointments in the technical department of The Sherwin-Williams Co. were announced recently.

H. J. L. Cotton of Cleveland was named Technical Coordinator for the paint company; he is now responsible for the general supervision of technical department activities in the fields of industrial products finishes and transportation finishes.

H. E. Spitzer of Chicago was appointed Director of Development, with general supervision of the paint, varnish and lacquer development laboratories at Chicago.

Cotton has been identified with the Sherwin-Williams organization since graduating from the University of Michigan in 1920. He joined a Detroit affiliate but in 1927 he was transferred to Cleveland as assistant to the Director of Varnish Research. Two years ago he was named technical coordinator of industrial finishes, a function which he continues in his new position.

H. J. L. Cotton and H. E. Spitzer

Spitzer, a graduate of North Dakota State College, started with the company in 1937. Since 1946 he has been in charge of the Chicago Technical Service Department. His new position includes correlation of development activities with sales, research and production.

Spitzer has appointed R. A. Moore, a graduate of Purdue University, as Director of the Chicago Technical Service Department.

Despatch Oven Celebrates Its 50th Year

Monday, June 9th, has been set for the open house celebration commemorating 50 years of progress for the Despatch Oven Co., Minneapolis, Minn., according to an announcement by C. P. Doherty, President and General Manager. The event is being held for the firm's customers and suppliers between the hours of 1:00 and 5:00 p.m. at the offices and factory, 619 S. E. 8th Street.

The Despatch Oven Co., one of the large manufacturers of a complete line of industrial ovens, industrial furnaces and related metal processing and finishing equipment, was founded by A. E. Grapp, an aggressive man with an inventive mind and a background of electrical training. Together with his son, H. L. Grapp, they introduced and developed a number of innovations that became the basis for an enterprise supplying equipment for controlled heat and humidity.

Since June 1947, when the present Board of Directors was elected, Despatch has been under the management of its operations executives. They are C. P. Doherty, President and General Manager; Fred Larsen, V.P. and Secretary; G. M. Lund, V.P. and Treasurer, and G. L. Schuster, V.P. and Chief Engineer.

Some of these men have been with Despatch during most of its existence. Together they have engineered heat applications for a wide variety of industries until today, the company has become known throughout the industry as the creator and developer of many patented techniques which are responsible for improved operations wherever a heat application or metal processing application is part of an industrial operation.

In addition to the main office and plant in Minneapolis, the company maintains a Chicago sales office at 4554 N. Broadway, and has sales representatives in all principal cities.

Electrostatic Flock Coating

We would appreciate receiving whatever information you could give us on the electrostatic process of flocking onto textile material.—*A.A.*

We are referring you to two concerns, namely, International Industrial Developers, Inc., and Vertipile, Inc., for specific information on this subject. (Addresses given in letter.) —*Editor.*

"Anthropahl" Is Found

According to your April 1952 issue of *Industrial Finishing* you have never heard of "Anthropahl." My first account of it came from page 14 of the December 1949 issue of *Chemical Engineering Progress.* It apparently originated in Sweden and is now handled by Reliance Paint Co., Inc., 64 S. 6th St., Brooklyn 11, N. Y. Mr. John Van N. King, President, would be glad to give your inquirer full information. —*V. B. Volkening, Chemical Engineering Dept., Dow Chemical Co.*

If you will refer to the American Swedish Monthly of December 1949, there is an article describing "Anthropahl" which may be the answer to your question. This describes an anti-corrodant, hot-melt paint, together with technique of application; and while there is a minor difference in the spelling of the name, it quite possibly is the product on which you are seeking information.—*Harold A. Henry, Regional Industrial Sales Manager, DuPont Co., Los Angeles.*

Furniture Finishing System

We notice, on page 84 of the March issue of *Industrial Finishing,* that one of your readers is interested in the name of a reliable firm capable of engineering and installing a forced air dry finishing system with conveyorization for wood furniture . . .

For the last five years we have designed, fabricated and installed complete furniture finishing systems, using the DeBurgh conveyor. This astonishing palletized adaptation of the power and free system probably represents the biggest advance in furniture finishing in 25 years.

Prior to this time, we designed and installed complete finishing systems, using conventional conveyors. We, therefore, feel that we are well qualified to render this account a real service. We would be pleased to have you refer this customer to us or refer our name to him.—*George Koch Sons.*

Chinchilla Finish on Walnut

My company is very much interested in the new "Chinchilla" finish on walnut, and has asked me to try and produce it. Could you give me any information on how to get this color; what materials to use, etc., and where to buy same?—*H.K.*

One expert tells us that the finish has a "yellowish tinge with shading of black around it." Probably any of

BETTER DROP IN!

It Will Mean
Money In
YOUR Wallet...

INDUSTRIAL FINISHING
Exposition of 1952

You can't afford to miss this presentation of the latest advances in the metal finishing field . . . Make Leap Year a Reap Year! Stay a jump ahead of your competition—board the metal finishing band wagon—It's Chicago for you in '52.

SEE EXHIBITS IN THESE FIELDS—Electroplating equipment and supplies, abrasives, organic finishes, materials handling apparatus, industrial coatings, chemical processes, adhesives, etc.

JUNE 16-19, 1952

INTERNATIONAL AMPHITHEATRE, CHICAGO

SPONSORED BY AMERICAN ELECTROPLATERS' SOCIETY

the manufacturers of wood finishing materials can supply what is required; main thing is to find out exactly what this chinchilla looks like and more about it. Can some reader tell us?—*Editor.*

"I'll meet you there, Ed. It'll be the hottest thing in town since Mrs. O'Leary's cow kicked over the lantern."

Found: Peel-off Coating That Stands Bake Oven Heat

This is in reference to our letter of March 7 and yours of March 11 and April 4, regarding our need for a "Brush-on, peel-off" coating that will stand 350° F. (See pages 84 and 86, April issue.)

We wrote to the firms you suggested and have had wonderful response in both letters and samples.

One concern sent us a sample of their product which has proved to be exactly what we need. We have put this product through all kinds of severe tests and are so well pleased that we have placed an order for some.

We have found that this product, unlike others submitted, will brush on easily; it stays on the surface to be masked, does not run over the entire castings, and peels off as easily as peeling a banana. This is important to us, as the surfaces to be masked are of uneven contours therefore impossible for us to use a masking tape.

We also found that we can paint over this material, if needed, and get the same results. We estimate that this material will save us many hours of labor and expense, and thought you might like to know the result of our search, as other firms may find themselves in the same predicament.—*B. Machine Works.*

We Coat Coil Stock

From time to time we have noticed inquiries in this publication concerning facilities for coating coil stock in continuous strip.

We are equipped to coat coil stock up to 16-in. wide by .035-in. thick with any of several paint formulations that will make it possible to fabricate after painting.

If any readers are interested in these facilities we would appreciate it if you would refer them to us.

We are also equipped to lithograph continuous overall patterns such as wood grain, basketweave, etc., where design is required on continuous strip. —*M. M. Young & Co.*

Address furnished on request.—*Ed.*

Thick Coat for Castings

We would like to know of a source for an ethyl cellulose material of the following qualifications:

The material must cover the roughness of sand castings through the use of single or multiple coats. The

MAR-PROOF LACQUER

SCHAEFER'S Mar-Proof Lacquer is a performance-proven finish that cannot be easily marred or scratched.

It's tough—tougher than the ordinary lacquers; meets the most critical requirements of current production.

Made in either clear gloss rubbing or satin finish, it produces a splendid transparent coating of full depth on maple, walnut, gum, mahogany and other cabnet woods.

Economical; gives plenty of coverage and dries quickly. Our Mar-Proof Lacquer Sealer is recommended with it for a first-coater.

Working samples furnished without obligation. Write for them!

THE SCHAEFER VARNISH COMPANY, INC.
Louisville, Kentucky

SCRATCH-PROOF

MAR-PROOF

STANDS LOTS OF ABUSE

coating should be about 1/64-in. thick and be pliable enough to stand impact without chipping, and yet soft enough to be easily gouged.

We would like to utilize our infrared oven, which is capable of a temperature of 460° F. The finishing material should be capable of either spray or dip application, and should bake free of sags.—*N.W.L. Co.*

Can some reader suggest something to meet or partially meet these requirements—if they are not impossible?—*Editor.*

Paint Paper Cups

We have had a great deal of trouble in trying to obtain the KR-431 paint cups, as described in an advertisement we are sending you. We have tried through a number of sources to get these cups. We formerly purchased them from The DeVilbiss Co. but they no longer carry them.

Any help you could give us in the way of a source of supply for this material will be appreciated.—*Control Corporation.*

In answer to your letter . . . please be advised that we manufacture the paper paint cups referred to.—*Bradford Products Co.*

Address on request.—*Editor.*

"Hey Dad—did you have the contract for putting a wrinkle finish on Mrs. Day's face?"

Air Dry Wrinkles

Will you please send me the names of manufacturers of air drying wrinkles? I believe I have seen advertisements of such materials in past issues of this magazine, and have read articles pertaining to same.—*D.H. Inc.*

Our reference card lists only two firms that offer this product. In a letter we are submitting their names and addresses.—*Editor.*

Paint to Kill Rust

Can you send us the names of manufacturers who produce a paint capable of dissolving rust in its mild forms? We believe this material to be of a zinc chromate-phosphoric acid base. Also, send us any information that you might have available on this type of paint.—*H. Mfg. Co.*

In a letter we are naming some concerns, any one of which can probably supply what you want.—*Editor.*

They Read It in I. F.

Some of the recent company letters to *Industrial Finishing*, referring to published items in this department and in Random Comment, asked for further information about: Processing Paint Sludge, Gold on Plastics, Sunshade Paint for Glass, Flock

Conveyor Line
Finishing Supervision

ANY PRODUCTION OPERATION working on a relatively tight schedule requires constant, expert supervision. This is particularly true in a C.L.F.* operation where the exercise of discretion is required by the man on the line. If he has an off day and supervision is not constant, trouble will mount and there will be a sharp increase in percentage of rejects.

The man who is supervising the C.L.F. operation must be a trained finishing expert. He should be a pliable and understanding personality who can readily recognize the strength and weaknesses of his men. He must command respect, be alert, and quickly detect spots that are likely to be a source of trouble. Suffice to say that supervision is an important key to a successful and profitable C.L.F. operation.

In the advertisements to follow we will discuss some of the possible sources of trouble that require constant watching and supervision.

If you are planning a new C.L.F. set-up, or if you are planning to convert your finishing production to C.L.F., our technical men have the "know how" to set up your schedule of operations and to recommend the materials to be used. They are at your service, without obligation. A phone call, wire or letter will give you the details of the recommended procedure to work out and solve your particular problems.

*Conveyor line finishing.

OUR 77TH YEAR OF SERVICE

The Lawrence-McFadden Co.

Headquarters for Fine Finishes Since 1875

Manufacturers of

FILLERS—STAINS—VARNISHES—LACQUERS—SEALERS—PRIMERS AND SPECIAL FINISHES FOR CONVEYOR LINE PRODUCTION

7430 STATE ROAD **PHILADELPHIA 36, PA.**

Coating, Emergency Light, Paint Heaters, Reducing Shop Noise, Screen Process Materials, Stripping Conveyor Hangers, Dip Coating Safety, Stick Lacquer, the Mask Washing Machine, etc.—*Editor.*

To Coat Holeless Beads

I am interested in pearlizing "no hole" beads. Kindly advise a source of supply from whom I can purchase automatic machinery for this purpose. Do you know of a process being used today for pearlizing "no hole" beads?

Your magazine has been a constant source of inspiration for ideas, and I look forward to your being able to help me.—*L.W.*

Has anyone a suggestion for this? —*Editor.*

Calrod Heater Used Only in Bede's Automotive Unit

We have noted with interest an article published on page 122 in the April issue of *Industrial Finishing*, describing a GE calrod heater as being used by Bede Products, Inc. The article is entirely misleading, since it implies that we use their unit in our Industrial Paint Heater. As a matter of actual fact, we use the calrod units *only in our Automobile Heater.*

We are somewhat concerned with the impression that this article may give to the trade, especially in view of the statement that the unit is cast into the aluminum base of the heater. This would lead one to believe and correctly so that the calrod heater is not removable.

Our Industrial Heater, in addition to being a 2000-watt capacity, is equipped with removable cartridge heaters which, of course, makes for convenience when one of them may burn out or be otherwise defective. A customer or prospective customer getting the impression from this article that all of our heaters are equipped with a cast-in heating unit would certainly do us no good.—*Bede Industrial Products Co.*

Dye White Birch Red?

One of our Canadian manufacturing companies has found that a great demand exists for cabinets finished with red birch veneer. The demand is so great the company is unable to obtain the amount of red birch required.

It has asked us if we could suggest any dyes which might be used to impregnate white birch to obtain the desired color. The company has very good equipment for carrying out any impregnation, and their only trouble is to locate a source of suitable wood dye.—*N.R.C., Ottawa, Ont.*

Any suggestions from readers? In a letter we have named a few concerns who may have what is wanted. —*Editor.*

Circular Screens for Painting?

Mr. A. A.: In a letter we received from the Editor of *Industrial Finishing Magazine*, he mentioned that you are interested in building circular screens that will print a continuous design. To the best of our knowledge, there is no one making such a screen.

If you should learn of anyone doing this type of work please notify us, as we would like this information also.

We manufacture and distribute a complete line of silk screen colors, supplies and equipment. If you do not have a copy of our 39-page De-Luxe Silk Screen Catalog, notify us and we will forward one immediately. —*Advance Process Supply Co.*

It's NEW!

"INDIAN SUMMER"* Stain

Intense research by technicians in the laboratories of the Chadeloid Corp., has produced a revolutionary NEW WOOD Finish. Now every manufacturer of finished wood products can expect greater sales appeal through increased customer acceptance.

Chadeloid "INDIAN SUMMER"* Stains bring to wood products:

- **Improved lightfastness**
- **New brilliance of color**
- **New color effects that stimulate sales**

"INDIAN SUMMER"* Stains are available through more than 150 licensees of the Chadeloid Corp.

For descriptive brochure and list of licensees, write:

CHADELOID CORPORATION

1819 Bankers Building, Chicago 3, Illinois

*TRADE MARK

Practically every

DeBURGH CONVEYOR

pays its cost in 10 months
or LESS from non-productive
labor alone!

SAVES:

Floor Space
Drier Size
Heat (a recurring expense)
and
Creates a Better Product

INVESTIGATE—*No charge for estimates*

DeBURGH CONVEYORS

Patented and Patents Pending

For Assembly, Finishing and Upholstery

1741 K St., N. W., Washington 6, D. C.

Superb

Distinctive finishes prepared by our Creative Studio are superb, too! They have individuality . . . attention arresting characteristics . . . sales appeal. Our highly skilled staff of artists conscientiously incorporate their experience and know-how to produce coatings that do a real selling job. We suggest you avail yourself of their creative abilities.

Reputable firms are invited to send samples to be finished . . . no cost or obligation.

No Tampering with Quality

Affiliate
GORDON BARTELS CO.
Roller Coating Specialists

ROCKFORD VARNISH *Company*
ROCKFORD, ILLINOIS
Manufacturers of Protective and Decorative Coatings

TV Plywood Specs.; Finish Trouble

As television cabinet buyer for our firm, I have run into the perennial problem of where to trace the root of trouble when running into poor cabinets, a situation occurring not too infrequently.

Your recent series of articles on "Finishing Furniture" was very informative. As far as my own experience, I believe that a poorly finished cabinet is due, not so much to improper materials or lack of finishing knowledge, but to deliberate negligence on the part of the finishing and sanding supervisors in their attempt to increase production.

In tracing the root of trouble in poor cabinets, I have found that, at times, inferior plywood has been the real source. It is in this field that your help would be appreciated.

Specifically, what I want is a set of plywood specifications that can be used on our purchase orders when ordering cabinets. These specs. would aid both the cabinet manufacturer and ourselves, for he could also use the specs. when ordering his plywood.

I am writing to you because our lacquer supplier advised us to do so, as you had helped him on occasions.

Any information or sources for information will be useful not only to us, but to others in the industry.—*A TV Corp.*

Although your question has mainly to do with a specification for plywood, I would like to comment on the other point mentioned, namely, the relationship between wood surface preparation and the final finished result. The sanding and preparation of panel surfaces in the millroom or cabinet assembly has a most important effect on both the efficiency of the finishing operation and the final finish quality, both in appearance and durability.

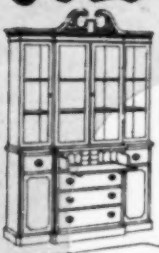
Correct preparation includes proper control in the machining, drum sanding, belt sanding and polishing operations. It includes careful inspection and patching on the wood—by "mudding in" with wood putties, burning in, removal of glue spots, etc.—before finishing. For some woods, particularly mahogany, it includes correct glue-sizing procedure between the initial and final belt sanding; and for any stock that stands for several hours after the final belt polishing operation and before finishing, it includes a final "slicking off" of the panel surface with a sandpaper in the fineness range of No. 240 (7/0) or No. 280 (8/0) just before staining.

Extra care in wood preparation more than pays for itself by cutting down the troubles, delays, repairs, recoats, etc., in finishing, and by reducing the amount of coating needed to produce a well finished appearance.

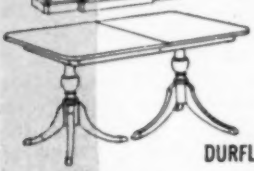
Excessive coating is an important cause of printing trouble and checking failure. We believe there is agreement among quality cabinet manufacturers on these points, and that any cabinet manufacturer who would like to check his procedures can get sound advice from leading suppliers of wood patching materials and of sandpaper and abrasives.

On the matter of plywood specifica-

BARRETT'S new DURFLEX LACQUER
Greatly exceeds Industry Standards for
COLD CHECK RESISTANCE!



BARRETT'S DURFLEX LACQUER with its companion DURFLEX SEALER provides a tough, durable and flexible finish with proven ability to withstand long periods of storage in wide temperature extremes. In actual tests, DURFLEX showed no checking after 25 complete cycles under temperatures ranging from + 110° F. to — 6° F.



DURFLEX offers the combined advantages of high quality and low cost for finishers of Radio and TV Cabinets, Desks and other fine furniture. Like other high quality lacquers, DURFLEX dries to handle in two hours, and can be rubbed after an overnight drying. Most important, DURFLEX SEALER powders quickly and does not gum the sandpaper.

Available in sheens from dead flat to high gloss, BARRETT'S DURFLEX LACQUER is the ideal finish for your finest pieces. At the same time, its low cost will enable you to use this superior finish throughout your production schedule.

FREE SAMPLE
Try BARRETT'S DURFLEX SEALER and DURFLEX LACQUER in your own plant at our expense. Write on your company letterhead for free samples. Please specify sheen desired.

Other Fine BARRETT Finishes Include:
WONDERFLAT LACQUER
WONDERHOT LACQUER

Barrett Varnish Company
1532 S. 50th COURT CICERO 50, ILLINOIS

a complete line of dependable industrial finishes since 1870

tions our information is somewhat meager. However, we have found the following, which may be already known to you:

There is a cabinet specification of the Radio/Television Manufacturers Association which includes some detail as to core stock, cross banding, back and face veneers, and some information as to panel construction, wood moisture limits and gluing—but this specification appears to be in question. The draft of a proposed revision considered by the RTMA in June 1951 contains only a brief statement about plywood as follows:

A) Panels must meet requirements of U. S. Department of Commerce standards for either hardwood or Douglas Fir Plywood, latest revision. Types and grades to be specified on drawing. Face veneers to have a firm texture.

B) Lumber. All exposed wood on the outside of the cabinet shall be cut clear and free from all defects and properly dried. Specie to be per drawing. All internal lumber to be hardwood.

E) A moisture content range of 6% to 9% is permissible in cabinets during process of assembly and finishing.

This seems to be specific in its reference to U. S. Department of Commerce Standards. We do not have them on hand, for reference at the moment.

We have also seen cabinet specifications used by some individual radio and TV manufacturers which include statements defining their requirements in panel stock and cabinet construction. The only one in our files is that of Sylvania.

About a year ago we applied to the Forest Products Laboratory of the U. S. Department of Agriculture at Madison, Wisc., for information and guidance on this problem. Their reply indicated that they feel the characteristics of panel stock, which affect finish quality and durability, are pretty much the same as those that determine general stability and quality as related to warping, cracking, etc. They sent us copies of the following bulletins:

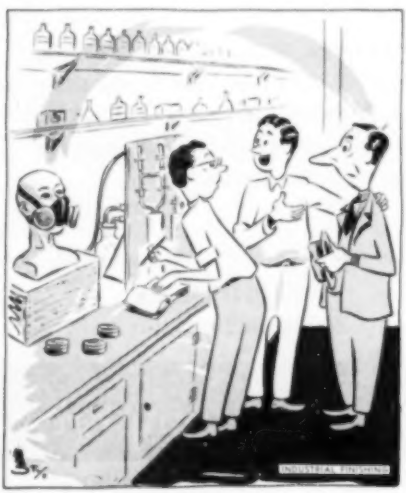
Bulletin R543: Notes on the manufacture of flat plywood.

Bulletin R1252: Causes of warping of plywood and veneered products.

Bulletin D1722: Moisture content of wood as related to finishing of furniture.

We found these bulletins useful and informative.

There is still a serious problem from the point of view of finish suppliers because when finish failure is encountered it is often difficult to reach an agreement as to the cause. These specifications do not tell us how to detect improper construction or defects that would be likely to result in finish failure. The only way we know of to determine in advance the suitability of any particular type



"Here's a sprayer who claims that our new respirators don't fit him properly."

PERFECTION
FURNITURE FINISHES

contain none of the conventional stearates or flattening agents but are flattened by synthesis giving a waxed effect and a hand rubbed appearance.

Outstanding advantages of PERFECTION FLAT FINISHES are . . . CLARITY OF GLOSS LACQUER EVEN IN LOWER SHEENS . . . SMOOTH . . . WON'T HAZE OR SWEAT BACK . . . WATER PROOF . . . LIQUOR PROOF . . . GRADES SUITED TO BUDGET AND DRYING TIME.

WRITE FOR SAMPLES

SEE THE DIFFERENCE FEEL THE DIFFERENCE

Perfection PAINT & COLOR COMPANY

INDIANAPOLIS 2, INDIANA

of panel stock for finishing, and its probable effect on finish life, is to have representative panels finished and submit them to agreed-upon testing procedures for cold check resistance, print resistance, etc., such as are proposed in the Cabinet Finishing Specification of the Radio/Television Manufacturers Association. Even the results so obtained would be subject to variation from unknown or uncontrollable variations in wood, and to variations in finishing procedure which are all too frequently involved in connection with repairs, reworks, etc. Assuming reputable sources of plywood and finishing material, this procedure should still be a satisfactory guide and control in maintaining acceptable finish quality.

We expect to pursue this subject further and hope to arrive at a better understanding of the variables in panel construction which influence finish performance.—*W. E. Martin, Technical Service, Grand Rapids Varnish Corporation.*

Furniture Refinishing; Silicone Polish Trouble

Our main business is refinishing furniture. Up until recently we have had no difficulty but in the last few months a new trouble has occurred so frequently that we are at a loss to explain it.

Continuing to use the same paint remover and the same lacquers, the surfaces of some of our furniture show little craters or fish eyes as soon as the undercoat or sealer is applied. Another coat of lacquer on top of this continues to show the same craters. Material does not stick to the places where these fish eyes appear; it just remains bare. Sanding it off and respraying it doesn't help. We have tried washing it off again and respraying it, but still no success. We have tried washing the surfaces with alcohol and spraying them as before; again with no success.

Our next thought was that perhaps we had a faulty batch of paint remover or lacquer. We had the manufacturers of both come and check the material and both said it was all right. We tried other paint removers and other lacquers and still the trouble showed up on some furniture. Someone suggested that it might be caused by the new type of furniture polish now being used and containing silicone. We are more or less certain that this is the cause of the trouble.

Has anyone on your staff had any experience with this trouble we are describing? If so, what success have they had in overcoming it? We are deeply concerned over this, inasmuch as it is appearing more and more.—*M.A.F. (Custom Quality Furniture).*

To me it seems quite apparent that your difficulty results from a polish containing silicone, having been used on the furniture. This is a frequent source of trouble now that most of the furniture polishes on the market contain silicone. Scores of such cases have come to our attention.

Two plans offer possibilities of overcoming the difficulty. The first is by doing an extremely thorough job of cleaning the polish from the surface. To carry out this plan the surfaces should be thoroughly washed with rags wet with xylol; then sanded with fine sand paper; again washed with xylol; again sanded and finally given another wash with xylol. The wash rags should be discarded after each washing operation, as they become contaminated with the silicone and, if used a second time, they will simply put it back on the surface.

It is inadvisable to wash the surfaces with lacquer thinner or other lacquer solvent, as this causes the sili-

Complete Thompson Vinsynite-Vinyl finishing system used on this Uniflow Walk-In Cooler: Vinsynite pretreatment, Vinyl Aluminum intermediate coat, and Brown Lacquer finish coat.

ADHESION WAS THE PROBLEM . . . THAT VINSYNITE *Solved!*

VINSYNITE HAS MANY ADVANTAGES FOR THE NUMEROUS MANUFACTURERS WHO USE IT

1. It is economical because it eliminates the expense of time and labor-consuming chemical pretreatment and costly equipment.
2. It is adaptable because it clings tight to any metal and can be applied like paint by spray, dip or brush.
3. It provides a firm, bond-tight base for the finish coat, so that corrosion is shut-out and the finish will give years of durable service.

Vinsynite has many other advantages which are discussed in detail in our report on Vinsynite which also gives results of Vinsynite's corrosion resistance under actual exposure conditions and details of its application. Write for your copy today.

Several years ago when the manufacturer of Uniflow Walk-In Coolers was dissatisfied with the adhesion of a finish to the heavy gauge steel exterior, he called upon us for a solution. Our recommendation of pretreating with Vinsynite proved more than satisfactory. Vinsynite clings to the metal; the finish clings to the Vinsynite. The manufacturer has been complimented by purchasers on the durability of the finish after years of use . . . even installations in Florida where the coolers are subjected to salt-spray atmosphere.

SPECIALTY COATINGS, INC.
DIVISION OF
THOMPSON & COMPANY
1087 Vincent Ave., Oakmont, Pennsylvania

cone to penetrate into the lacquer film. The idea is to use a solvent that is a good solvent for silicone, but which does not even soften the lacquer. The sanding should preferably be done in front of an exhaust hood so that sanding dust contaminated with silicone will be carried out of finishing room immediately. I cannot guarantee that this plan will work but I think it worth a careful trial.

The second plan is to first clean the surfaces with xylol; sand and reclean with xylol exactly as in the first plan. Following this cleaning, sanding and cleaning procedure, the surfaces are recoated with a lacquer to which one-eighth to one-quarter fluid ounce per gallon of silicone DC-200 is added by the finisher. This addition of silicone usually overcomes the craters in the refinishing lacquer.

While this plan is more effective than the first plan, it has two disadvantages: 1) If any of the spray dust from the lacquer to which silicone has been added gets on any other work in process in the shop, that work will probably show more or less crawling or cratering of subsequent coats. 2) If it should ever be necessary to refinish the surfaces on which the lacquer containing silicone was applied, the original difficulty will be experienced.

In trying out the second plan it is important that the addition of silicone be limited to the very small proportion mentioned above. Silicone DC-200 can be purchased from The Dow Chemical Co., Midland, Michigan, and the price is in the neighborhood of $35.00 to $40.00 per gallon.

Inasmuch as we are large suppliers of finishes to furniture manufacturers, this problem has been of grave concern to us. We consider it unfortunate that the majority of polish manufacturers have completely disregarded the refinishing problem in order to produce polishes that will give a slightly higher initial gloss. To give you a more complete understanding of the situation, we are sending you a letter that we sent to all of our salesmen on October 30, 1950. In the meantime many additional cases of of refinishing difficulties, because of the use of silicone polish, have been brought to our attention.

We recommend to the furniture manufacturers who use our finishing materials, and their dealers, a silicone-free self-cleaning polish. It is a heavy-bodied emulsion-type polish and for use, one part of polish is thinned with four parts of water, making it economical . . . —*Wayne R. Fuller, Director of Research, Grand Rapids Varnish Corp.*

See also the article entitled, "Silicones in Finishes," published in Mar. 1952 issue of this magazine, beginning on page 72.—*Editor.*

Baked Wrinkle Finish

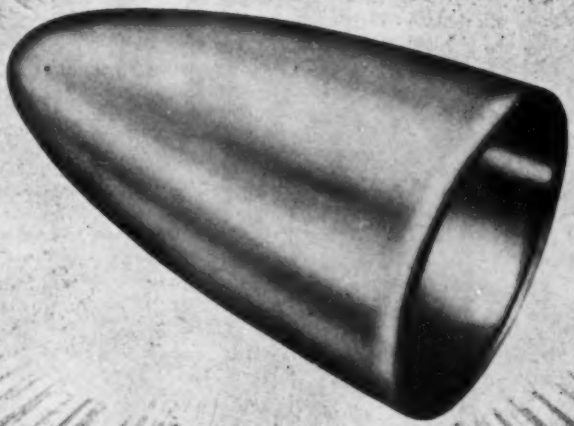
We are about to start using wrinkle finish on metal. We have an infrared conveyor oven that gives out heat which reaches a temperature of 350° F. Articles pass through every six minutes, but this speed can be slowed down if necessary. The oven is opened at both ends.

What do you use to thin a wrinkle enamel? How much do you use?

How is wrinkle finish applied? Should a mist coat be sprayed first, then followed with a heavy coat? How much air pressure do you use? High 70 to 80-lbs. or low 30 to 40-lbs.? Can I use a siphon cup attached to the spray gun or do I have to use a pressure tank? What is the best way to get a uniform wrinkle finish.—*A.B.*

Unfortunately you have neglected to give some of the most important factors relating to your operation.

. . unharmed
by 250 hours of Salt Spray



Here is laboratory proof that dramatizes the stubborn protection given by a Randolph Finish.

This aluminum lighting fixture part—with one coating of Randolph Clear Baking S. G. Enamel Y-7300—was bombarded for 250 continuous hours in the Salt Spray (Fog) Chamber of a nationally-known testing company. Exposed to these severe moisture conditions, the part emerged without a flaw on its perfect surface.

Here is product-protection that never yields under the severest test! And that's not the whole story of Randolph quality. Randolph Finishes make your product look better, serve better and wear better—at lower costs!

We'll be glad to send you a free sample of Clear-Baking S. G. Finish Y-7300 if you write us. Any time you have finishing difficulties, call on our able technicians for help. They specialize in solving finishing problems.

DOPES · LACQUERS · ENAMELS · THINNERS

RANDOLPH PRODUCTS CO.

CARLSTADT, N. J.

These are: Size and shape of pieces to be painted, color of wrinkle, anticipated volume of production, and the use or service to which the painted pieces or products will be subjected. This information is needed to make an intelligent and thorough analysis of your problem. However, on the basis of what you have written, it is still possible to make some recommendations of a general nature.

It is almost meaningless to say that an infra-red oven reaches a temperature of 350° F. An article going through the oven might reach an average temperature of 350° F., yet any variation of size, shape, color or material could affect the average temperature from 50° to 100° F. For this reason most ovens of this type have a device for rotating the work as it passes through, thus distributing the surface heat more evenly.

A good wrinkle baking job can be produced in a well designed infra-red oven. However, it may be necessary to slow down the conveyor speed. Six minutes is just about time to get the wrinkle pattern well formed; then from two to six minutes more time in the oven will be needed for the film to attain sufficient hardness. All of this, of course, will be dependent upon the size and concentration of the infrared lamps or heat units, their distance from the article, and how well they are distributed around it.

If you are going to use black or other dark colors, you need not worry about discoloration. However, if light colored wrinkle enamels are used, and if various parts have to match, you may have some difficulties. Changing the point from which the article is suspended, moving the lamp banks, or removal of a lamp here or there—one or all of these adjustments can help to prevent discoloration of your baking enamel. Further, your paint supplier may be able to furnish heat-resistant light colors.

It is certainly not advisable to reduce (or thin) any wrinkle enamel except upon the supplier's instructions, and only then with a reducer that he recommends. Most wrinkle enamels are sold ready to use.

Wrinkle enamels are now supplied at much lower viscosities than formerly. Moreover, it is no longer necessary to spray an excessively heavy coat to insure a good texture. For this reason, many sprayers now apply their wrinkle enamel in one good wet coat. Personally I like the mist coat followed by a full wet coat. It seems to reduce the possibility of runs, sags, or thin spots, besides contributing to a more uniform pattern and fewer rejects.

Air pressure for spraying is dependent upon both your spraying system and the material you are spraying. A little experimenting will soon determine a safe range within which you can operate—or consult the dealer from whom you buy spray guns.

If you are doing an occasional piece, or spraying only a couple of quarts of material each day, a cup or suction gun is okay for wrinkle or any other material. Wrinkle enamels present no special spraying problems. However, for production work of high quality, the suction gun does not belong; it is too clumsy and too slow. A pressure tank sends the wrinkle enamel right up to the spray gun. Then the compressed air can be utilized to properly atomize the enamel. This insures an even (uniform) coat of proper wetness to flow out as it should.—*George A. Conrad.*

Shell Chem. Advances Huldrum

Mr. G. W. Huldrum, Jr., has been appointed Sales Manager of the Western Division of Shell Chemical Corp. Huldrum began his career as a Chemist at Shell Chemical's Pittsburg, California, plant in 1939 after completion of studies at the University of California.

High Production Sanding!

WITH LIGHTWEIGHT, POWERFUL NATIONAL SANDERS

CUT SANDING TIME AS MUCH AS 75%

These fast, compact, air driven block sanders are adaptable to many sanding operations previously possible only by hand sanding. Because they are easy to operate . . . vibrationless . . . and astonishingly fast, they can cut sanding time as much as 75%, and at the same time, give a better finish. See your distributor, or write for details.

• *Write for our New Sanding Catalog*

NATIONAL NS SANDERS

NATIONAL AIR SANDER, INC.
2820 AUBURN STREET, ROCKFORD, ILLINOIS

Industrial Finishing Exposition

The Industrial Finishing Exposition of 1952 is slated for June 16 through 19 at Chicago's International Amphitheatre. The Exposition is the third such event sponsored by the American Electroplaters' Society. The Society's 39th Annual Convention will be held concurrently at the Conrad Hilton Hotel.

Carrying an "All-Industry" theme, the Industrial Finishing Exposition has been enlarged to include displays of all types of organic and inorganic finishes and equipment.

Previous Finishing Expositions at Detroit, Michigan, and Atlantic City, New Jersey, were confined to the display of base metals and chemicals, plating and polishing equipment, and machinery used in electroplating phases of metal finishing.

An exhibit, still in the formative stage, is that of the Finishing Trade Institute, a federation of job shop enamelers and japanners. This exhibit will show painting applications and processes, along with finished products of home, industrial and military use.

E. D. Griffin Retires as V.P. of P.P.G. Co.'s Paint Division

Retirement of Emmet D. Griffin as vice president in charge of Pittsburgh Plate Glass Co.'s paint division has been announced by Harry B. Higgins, president.

One of the nation's leading paint manufacturing executives, Mr. Griffin retires from active company work but continues to serve as a member of the Board of Directors for at least a year and will also function as a general consultant. He has been associated with Pittsburgh Plate Glass Co. since 1903.

Ross Enginering Corp. Opens New Plant No. 3

An official opening of the J. O. Ross Engineering Corp.'s new plant at Highland Park, N. J., was held April 12. More than 500 invited guests, including the local mayor, were welcomed by J. O. Ross, founder and Chairman of the Board, and S. W. Fletcher, President of the company.

The new plant, costing over $1,000,000, is of brick and steel fireproof construction. It will add more than 75,000-sq.ft. to the company's present manufacturing facilities. (Other Ross plants are located at New Brunswick, N. J. and Montreal, Canada.) It is equipped with the latest and most efficient machinery for fabrication of sheet metal—aluminum, stainless steel and copper, sheet steel, plate fabrication, duct work and assemblies.

Every square foot of manufacturing space is covered by traveling cranes, and the building features fully enclosed car loading and unloading facilities.

Factory offices and a Testing & Research Laboratory are incorporated in the new structure. The laboratory has units large enough to produce results that can be exactly duplicated on a commercial scale. Various types of ovens, dryers, and handling apparatus, along with many recording instruments are utilized for testing purposes; all sources of heat are available.

This new plant will increase the firm's capacity for building the Ross Industrial Air Systems used throughout practically all industries for drying, baking, heating, air conditioning, heat treating, curing, ventilating and similar purposes.

Sharpe Mfg. Co. Appoints Two Important Men to Staff

Sharpe Mfg. Co. (Paint Spraying Equipment & Accessories), Los Angeles, Calif., announces the appointment of Riley G. Jones as a sales engineer. Mr. Riley Jones is particularly well qualified as he has been serving the spray equipment field for the past 19 years. Mr. Jones formerly served as western sales manager for other well known spray equipment concerns.

The addition of Mr. Riley Jones to the staff, and Mr. Earl Briggs as plant manager and designing engineer, are a part of the new development program by the Sharpe Mfg. Co.

Henry Kidd, V.P. of DeVilbiss Spray Painting Equip. Div'n.

Appointment of Henry M. Kidd as vice president and sales manager of the De Vilbiss Co.'s spray painting equipment division, is announcd by Howard P. De Vilbiss, president of the company.

Mr. Kidd has been associated with De Vilbiss for more than 18 years. When he joined the company, he entered a sales training course which gave him an opportunity to work in every department of the plant. After this indoctrination, he became a sales correspondent and rapidly rose in this division, being named assistant sales manager in 1944. In October, 1950, Mr. Kidd was appointed sales manager of the division. During his tenure with the company, sales of spray painting equipment have increased and last year the highest dollar volume ever reached by the division was recorded.

Die-cut to your exact specifications. Increases efficiency! Speeds-up production! *Expedites Defense Orders!*

PHONE or WRITE FOR PRICES and SAMPLES.

PANOCO Dept. I
505 Carroll St., Brooklyn 15, N.Y.

A Salute to Screen Process

A large crowd turned out to the April 8th meeting of the St. Louis Advertising Club to take part in a salute to Screen Process Progress.

Daniel P. Novak, Executive Secretary of the Screen Process Printing Association, International, delivered an address to the Ad Clubbers on behalf of the St. Louis Chapter of the International organization. Citing the coming period of increased advertising activity . . . Novak termed advertisers "want creators. As such," he continued, "it follows that a determination to do a 'complete' job of graphic selling and merchandising should be the paramount consideration of these groups." He stated that "Screen Process didn't pretend to hold answers to all graphic problems" but suggested that "screen process printing definitely opened many avenues of merchandising not fully exploited by advertising people." With samples of screen process ad work he illustrated the unusual graphic results obtainable, the scope of the method and the range of surfaces upon which screen printing is successfully applied. "The advent of daylight fluorescents—today a most exciting phenomenom—is a forte of screen processors especially in outdoor uses," he stated.

Gasway Rollacoat Finisher

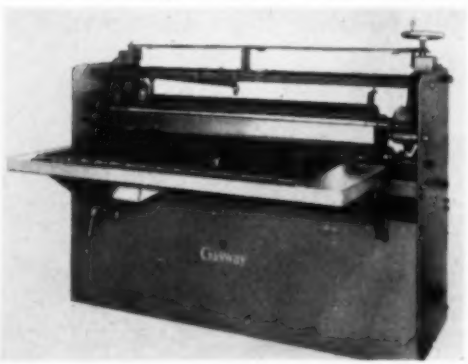
The new 32-B Gasway Rollacoat Finisher coats material up to 48-in. in width and 3-in. in thickness at speeds of 30 to 90-ft. of linear travel per minute. Higher or lower speeds available on special order.

The manufacturer attributes the ability of the coater to handle this wide range of materials and material sizes at varied speeds to the extreme flexibility of its material handling kits. These six accessory kits make it possible to use this basic rollacoat unit in practically any type of production coating line where flat material is finished and controlled thickness of coating is necessary.

The kits for the Gasway 32-B Rollacoat Unit include: A standard feed table with adjustable edge guide; a feed conveyor kit that can be added to the feed table making it into a short belt feed; a delivery table conveyor kit that can be mounted on the rear of the machine to carry small finished pieces far enough away from the machine which permits them to drop onto a drying conveyor; a pair of driven feed rolls that can be mounted on the front of the machine in place of the feed table; an extra long feed table with multiple drive rolls that can be added for handling long and heavy sheets; and a bushing unit with dust removing fan that can be added to the long feed table. A paint circulating pump can be added to deliver paint to the coating roll.

For further information on roller coating send for the 12-page Gasway Blue Book on Rollacoat Finishers. Address Gasway Corporation, 6465 N. Ravenswood Ave., Chicago 26, Ill.

The new 32-B Gasway Rollacoat Finisher coats material up to 48-in. in width, at fast speed.



Synthetic Clear Enamel for Chrome Plate System

A new synthetic clear enamel for use in the protection of chrome plate systems is announced by the Rinshed-Mason Co., 5935 Milford Ave., Detroit 10, Michigan and Anaheim, Calif.

Introduced under the trade-name Rust-Chek, the product is presently available in five separate formulas, designed for either high, medium or low baking schedules. Hand spray, electrostatic spray or dipping methods can be accommodated.

The line has been engineered to compensate for the lack of nickel available for civilian end products such as automotive chrome plate. When Rust-Chek is applied over "scant" chrome plating (minus the

Paasche

PORTABLE AIRPAINTING UNITS

Designed for Action

Paasche Sturdy Aircompressor Units offer Superb Performance. They are Quality Built to stay on the job, providing Efficient Service for many, many years.

Exclusive Paasche Features

Original construction—Superior Design—Greater Operating Efficiency—Delivers More CFM per Horse Power Used—thus you are assured of Lower Operating Cost and a Minimum of Maintenance Expense.

Made to withstand the rigors of the hardest type of use and will give many years of uninterrupted service.

PORTABLE AIRCOMPRESSORS FROM ¼ TO 9 HP ELECTRIC OR GASOLINE

All Paasche Aircompressors are equipped with Paasche Patented Airconditioner Units to remove Water, Oil and Dirt from the Air Line and provide Clean, Dry Air Delivery.

Choice of Three Types of Base Mountings make Paasche Aircompressor Units with Metal or Rubber Tired Wheels, Trailer Mounting and Metal Base Mountings suitable for most every Portable Requirement.

Paasche Airbrush Co.

WRITE FOR CATALOG PA-151

1913 DIVERSEY PARKWAY, CHICAGO 14, ILL.

usual nickel coat) the plating is given long-term protection from rust and peeling.

All salt-spray and humidity tests of Rust-Chek, as well as year-long Florida exposure tests have proven completely satisfactory.

Available on request is a Rinshed-Mason technical bulletin containing all Rust-Chek specifications and recommended chrome cleaning procedures. The product will be displayed at the Industrial Finishes Exposition in Chicago in June.

Automatic Spray Painting and Masking Machine

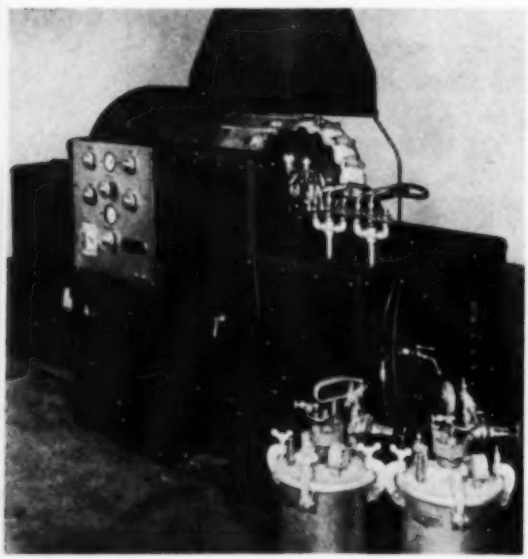
A new machine recently developed and now being manufactured by the Finish Engineering Co., Inc., 1115 Cherry St., Erie, Penna., can be set to spray to four different colors in one loading, as fast as the operator can load. Production rates of 50 pieces per minute have been attained, with only six hours experience by the operator.

Masks are automatically washed after each spray, which means steady production at the rate of 3000 or more pieces per hour, since no time is lost in mask cleaning.

The machine illustrated in the accompanying picture is painting two colors on a toy. It is adaptable for mask painting a wide variety of parts; the machine will be useful to any volume decorator of moldings, castings or stampings. Changing masks for a different setup is accomplished in a matter of minutes.

Power for operating the machine is supplied by an air motor. Mask washing is accomplished by turbulent circulation of solvent, using an impeller powered by a 1/3-hp. explosion-proof motor. Dials for adjusting speeds and working pressure are conveniently grouped on a central panel within easy reach of the operator. This machine is efficient and economical, particularly for masked painting of small parts or products on a mass production basis.

For rapid and accurate production of masked spray painting in one to four colors.



Low Baking Synthetic Finish Saves Furniture

The United Lacquer Mfg. Corp., 1001 W. Elizabeth Ave., Linden, N. J., announces that it has developed a new clear synthetic finish, BO-535, which enables furniture to successfully resist damage by a wide range of normally destructive agents.

While the low-bake synthetic costs more than lacquer, it covers larger areas, according to Saul Cantor, Vice President of United Lacquer.

"In actual production runs with this material," he pointed out, "BO-535 covered 235-sq.ft. per gallon as

STAINS • GLAZES

- LACQUERS
- SEALERS
- FILLERS
- ENAMELS
- UNDERCOATS
- SHELLAC
- SPECIALTY FINISHES

FOR APPLICATION BY ALL METHODS

•

Industrial Finishes in Step with the Times

Stains and Glazes to produce all modern or traditional colors with rare attractiveness. Specially formulated to give easy application with quick, dependable drying.

JAMES B. DAY & CO.

CHICAGO 14

KEEP SPRAY BOOTHS SAFER FROM FIRE!

. . . WITH NON-INFLAMMABLE

BOOTHCOTE #4

FOR DRY WALL BOOTHS AND THE NEW

BOOTHCOTE #5

FOR WATER WASH BOOTHS

Makes frequent cleaning easy. Premixed, ready to use, safe to store. Saves time, labor, no flaking off. Spray or brush on clean booth. When desired, operator peels off overspray in sheets. Advocated by insurance companies.

Money-back trial offer: 5 gals. **$6.25**

HYGRADE'S STERLING CREME

protects hands and arms from paint, grease, ink, etc. penetrating the skin. Soil washes off easily without harsh solvents or cleaners. 40 lb. pail **$12**

HYGRADE'S STERLING CLEANER

(WATERLESS HAND CLEANER)

dissolves grease, grime, fresh paint, tar, printers' ink, shellac, mastic cement, etc. without water.

40 lb. pail $9.00
All prices f.o.b. Buffalo

HYGRADE

FOOD PRODUCTS CORP.
Industrial Div., 18 Stetson St.
Buffalo 6, N. Y.

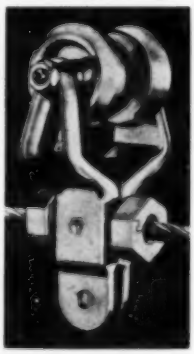
against 140-sq.ft. of a comparable wood lacquer. Also fewer coats of the new material are necessary."

In addition, BO-535 has excellent mar resistance, toughness, cold check resistance and package stability. Results of subjecting panels finished with the new synthetic, to boiling water, cold water, boiling soap solution, alcohol-water mixture, nail polish remover, nail polish and cold cream, are outlined in a news release which can be obtained from the company.

BO-535 requires baking at 150° F. for 1½ hours, or at 140° F. for two hours, or at 120° F. overnight. For best results, it should be applied over a coating of United's S-4077 sanding sealer, which may be sanded within one hour.

Cable Conveyor System

The successful application of overhead monorail cable conveyor systems to heavy duty, as well as lightweight materials handling purposes, was recently reported by Detroit manufacturers. The use of 9/16-in. steel core cable in joining trolley brackets was accomplished with complete satisfaction, according to that firm's engineers. This was made possible by the Diagle-Gaboury development of the split nut and trolley bracket assembly.



In the D-G System, the cable passes through the sleeves of the split bracket. The sleeves have internal serrations. Externally, they are tapered in shape and threaded. When the cable

NON-INJURIOUS ELECTRO NON-INFLAMMABLE

COLD STRIPPER

FASTEST *in Action* LOWEST *in Price*

WRITE FOR TESTING SAMPLE OR ORDER
5-GALLONS AT DRUM PRICE

Specify whether dip or brush type is desired

Allied Finishing Specialties Co.

2641 W. Grand Ave. • Chicago 12, Illinois

is enveloped by the bracket sleeves, the halves of the split nut are then brought together on the sleeve and turned on the expanding threads of the taper. In this way the nut exerts a 360° compression on the sleeve causing it to establish a biting hold on the cable with its internal serrations. It is stated that in this fixed position on the cable, trolley brackets withstand heavy loads without slipping.

Literature and technical data on the D-G Cable Conveyor Systems can be obtained by writing to Daigle-Gaboury, Inc., 20175 John R., Detroit 3, Michigan.

Corrosion Consultants

The A. V. Smith Engineering Co., corrosion Consultants, announces its new location in the Coulter Building, 121 Coulter Ave., Ardmore, Pennsylvania.

Small Parts Finishing System

A system that completely finishes 1440 small parts per hour is announced by The Cincinnati Cleaning & Finishing Machinery Co., Ironton, and Cincinnati, Ohio. The equipment washes, phosphatizes, rinses, and dries the parts, then dip paints, drains and bakes them, returning them to the loading station for unloading by the operator.

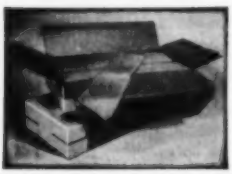
Each machine is designed specifically for the parts to be finished. One, recently installed, processes voltage regulator covers for an auto manufacturer. These parts are 3½-in. long, 2½-in. wide and 2-in. deep.

The system is extremely compact, occupying a 20-ft. square of floor space and is 10-ft. high. It is made as an integral assembly so that it can be moved in the event of plant rearrangement.

To allow for variations in drying

NOW! Tack Cloth in Handy Rolls *or* Cut Bulk

Cut off any size piece and use as needed.



Already cut and folded, ready to use.

Now you can get Tack Cloth packed the way it's easiest for you to use—either in 150 yard rolls of 36" wide cloth or in handy cartons—100 or more Tack Cloths to the carton.

No matter which way you buy it, you can be sure that every square inch will **stay** SOFT and TACKY until the very last bit is used up.

The Cut Bulk size is 18" x 36"—folded to 4½" x 18" for easy handling. **All of our Tack Cloth is Spontaneous Combustion-Proof, Lint-Free and Wax-Free.** It's clean and sanitary—there's no waste.

Write today for complete information, prices and samples.

Baughn Chemical Products Company

"The Tacky Wiper Specialists"

7027 N. RAVENSWOOD CHICAGO 26, ILL.

Also Individually Packed in Glassine Envelopes —144 to the Carton.

A WARRANTY OF SATISFACTION IN EVERY CARTON

time occasioned by temperature or humidity, each oven is wired in four banks. Electrical input and, thus, heat can be varied over a wide range.

Any small part, produced in large quantities can be efficiently processed in this equipment. Further details can be obtained by writing direct to the manufacturer, The Cincinnati Cleaning & Finishing Machinery Co., Schmidt Bldg., Cincinnati, Ohio.

Paint Strainer & Stand

The Rein-Strainer has an aluminum-coated steel wire stand that supports an aluminum funnel in which a copper-mesh strainer is held in place by a steel wire loop. It is durable, well made and rust resistant. The strainer is distributed by Gardner Laboratory, Inc., 4723 Elm St., Bethesda, Maryland.

"Paint Stick" Does Not Rub Off or Smear

Made for application by wiping and offered in semi-solidified stick form, Paint-Stick hardens in short time and becomes permanent.

It does not rub off or smear when handled and can be kept on work bench or table for intermittant applications as parts are tested and inspected. "Paint-Stick" brings out stamped impressions or engravings on all smooth surfaces, regardless of type of materials.

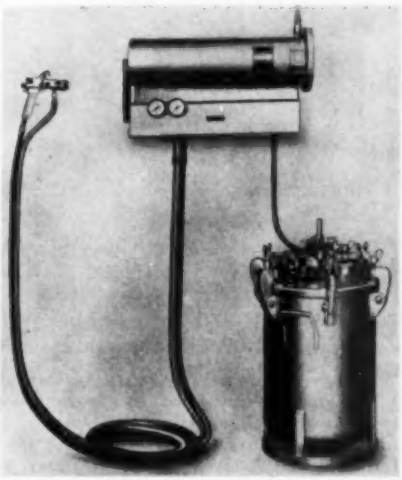
Use is by applying to surface and indentations, then rubbing off the surface with cloth, leaving paint in areas to be marked. Paint fill-ins expand and contract with parts and can be subjected to temperatures as high as 500° F. It is distributed by The Clearview Co., 177 Stanton St., New York 2, N. Y.

Pumpless Hot Spray Unit

The superior finishes obtainable by hot spray painting and the proven economies associated with this process, which utilizes heat as a viscosity reducing agent, are now available to a wide range of industries through the introduction and use of improved and safe heating equipment.

A device called "Therm-O-Spray," placed on the market by Special Equipment Corp., 225 Lafayette St., New York 12, N. Y., is based on the principle that the ideal method of applying hot coatings is to heat a small quantity of paint for a short period of time under constant temperature and pressure just before spraying. In "Therm-O-Spray" there are no moving parts. Circulating hot air keeps paint in both the paint hose and heat exchanger at constant temuerature, even during interruptions in spraying. The construction of the heater is such that color changes or cleaning can be easily accomplished in a few minutes.

Filtered, moisture-free air is passed



The paint is heated in electric air-heater.

Stille-Young

FINISHES FIRST

GO FOR QUALITY . . .

There is no question when you select STILLE-YOUNG finishes

GO FOR PERFORMANCE . . .

A STILLE-YOUNG finish is a champion of performance

GO FOR ECONOMY . . .

The cost of STILLE-YOUNG finishes is surprisingly low, yet high in quality

LET US PROVE THAT . . . .

"STILLE-YOUNG finishes first"

★

The

STILLE-YOUNG CORPORATION

Manufacturers

LACQUERS FILLERS STAINS
ENAMELS PAINTS

2752 N. Clybourn Avenue

Chicago 14, Illinois

Standard of the FINISHING INDUSTRY for 17 years.

DETROIT "HANDY" TAC" RAG

DETRO MFG. & SALES CO., INC., CULVER CITY, CALIF.

Spe-de-way

WOOD BLEACH

This single operation, controllable, Patented Bleach

- **Requires No Neutralization**
- **Does Not Raise the Grain**
- **Leaves No Deposit**
- **Wood Is Left Neutral**
- **Economical . . . Dependable**

Gallon Unit makes two gallons of bleaching solution. Application by spray or synthetic rubber sponge. Wood is ready for finishing in less than two hours.

Delivered prices quoted on request.

Spe-de-way **Products Co.**

manufacturers

3639 N. Columbia Blvd., Portland, Ore.

through a thermostat-regulated, explosion-proof electric air heater, where it is heated to a temperature between 300° and 400° F. This superheated air then passes through the heat exchanger and heats the paint or lacquer to the temperature recommended by the material manufacturer. This heating unit was tested and perfected during several years use in leading European industrial plants.

The unit consumes 1400 watts, and is ready for use within 15 minutes after switching on electric current.

Jensen Specialties Developes New Radiant Heat Oven

A new, completely integrated, radiant heating oven for industrial baking and drying at temperatures of 650° F. or less has been developed by Jensen Specialties, Inc., of Detroit, Michigan.

Workmen at Jensen Specialties, Detroit, Michigan, are shown installing a heater panel in its pantograph mounting on Jensen's new, completely integrated, radiant heating oven for industrial baking at temperatures of 650° F. or less. The oven utilizes 2000-watt General Electric Calrod heaters.

Have You A BAKING OR DRYING PROBLEM?

"Michigan Oven" Has What It Takes to Solve It!

If you have a baking or drying problem, let us tackle it for you. We are confident our engineering staff's 150 years of combined oven engineering experience will enable us to come up with the answer—just as we have for many leading manufacturers throughout the nation. Write and tell us about your problem.

Quick Service

Continuous monorail conveyor oven for fluorescent light reflectors.

MICHIGAN OVEN COMPANY MOGO

Write for Bulletin 951

MICHIGAN OVEN COMPANY

4540 Grand River Ave. Detroit 8, Mich.

The oven, which utilizes 2000-watt General Electric Calrod heaters, is manufactured in a complete panel, including tubular heating elements, reflectors, and insulation, with plug-in receptacle and pantograph mounting features.

The heater panels on the new oven, designed to be freely interchangeable, enable Jensen to build units of any length, size, or rating and to change ratings of finished ovens at will.

According to Jensen engineers, the new oven can handle three times more work than earlier radiant heating models—the pay load heating result often being 18,000 degree-pounds per kilowatt hour. This is possible, they say, because the General Electric tubular heaters allow a greater concentration of heat per unit area.

Heater panels may be opened and serviced from outside the oven, thus enabling users to replace a heater element during operation in approximately one minute. The G-E Calrod heaters, with plug-in, lock-in receptacles, are non-fragile, and have an average life in excess of 7000 hours, the Jensen engineers claim.

"In addition," they pointed out, "precise temperature control is possible because the Calrod heaters attain full heat in 2½ minutes, and cool in 50 seconds to a temperature too low to burn paper."

Industrial Finishing Week in Chicago, June 15-21

Mayor Martin H. Kennelly of Chicago has issued a Proclamation designating the week of June 15 through June 21, 1952 as Industrial Finishing week in Chicago. He recommends and urges that full advantage be taken by the citizens of Chicago to acquaint themselves with the men, industries and educational institutions responsible for the present high standard of industrial finishing.

Wilkinson

WAX RUBBING LUBRICANT

IT SMASHES THOSE RUBBING ROOM BOTTLENECKS!

Available in two colors: Universal Brown and Natural.

WILKINSON'S WAX RUBBING LUBRICANT is a material of extensive research and customer survey. Actually, it gives your customers furniture with that "expensive looking" wax rubbed finish so desirable in developing sales.

Consider these features:

WILKINSON'S Wax Rubbing Lubricant is free of "blooming" paraffin oils; allows faster cutting with fine abrasive paper; cleans up easily with no drag; polishes to a soft patina, or lends itself to further high gloss polishing with other WILKINSON Products; produces a hard, mar-resistant finish to minimize showroom repairs caused by packing and handling. Try it—if not satisfactory, return shipment at our expense.

Wilkinson EQUIPMENT & SUPPLY CORP.

6958 S. WENTWORTH AVE. ■ CHICAGO 21, ILLINOIS

Lacquer Shading Stains

Behlen's shading stains are primarily used for glazing over lacquers to produce antiqued effects. According to the supplier, H. Behlen & Bro., Inc., 10 Christopher St., New York 14, N. Y., their rich full-bodied color will blend readily with the basic undercoat. They are available in light and dark mahogany and walnut, and in honey and red maple.

DeVilbiss Introduces New Portable Air Compressors

A new line of portable air compressors in three sizes is announced by The DeVilbiss Co., Toledo, Ohio. Each compressor is mounted on a trailer with a standard trailer hitch for towing behind a car or truck. The compressors also can be obtained with skid mountings where great mobility is not required or mounting in a truck body is desired.

The compressors are made in three sizes to deliver 21, 35 or 50 cubic feet of air per minute. In designing the portable units, DeVilbiss engineers have used V-type, 4-cylinder 2-stage compressors to assure long periods of dependable, continuous operation.

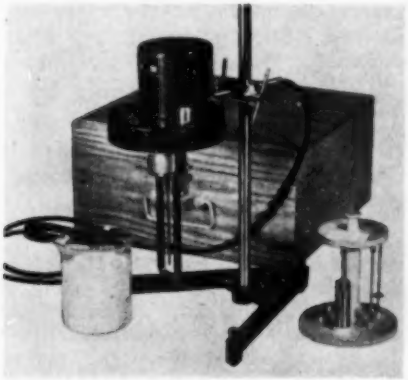
The compressors are driven by heavy duty, industrial type gasoline engines which are air-cooled. The engines are available with either electric or magnetic engine starting systems.

Forest Products Research Soc. 1952 National Meeting

The 1952 National Meeting of the Forest Products Research Society will be held in Milwaukee, June 23 to 25. Ralph H. Bescher, Manager of Technical Department, Wood Preservation Division, Koppers Co., Orrville, Ohio, is general chairman.

Synchro-Lectric Viscometers

The Brookfield Engineering Laboratories, Inc., of Stoughton, Mass., announces the addition of several new models to its line of Brookfield Synchro-Lectric Viscometers. Also a number of new features have been added to all standard models of the Brookfield Viscometer.



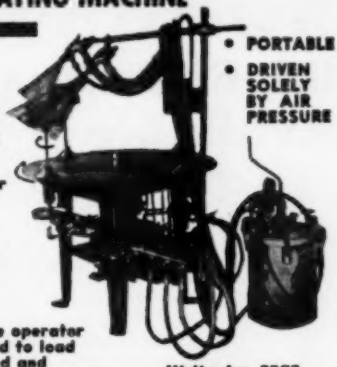
Determines viscosity quickly and accurately.

In addition to the new 8-speed model illustrated here, and a new modified 4-speed model, the 1952 line of Brookfield Viscometers includes some ten other single and 4-speed models, available in various speeds up to 600-rpm. Any standard model may be secured with explosion-proof construction when such is desired.

As shown in the above picture, each new Brookfield Viscometer is accompanied by a complete set of suitable spindles, a convenient spindle holder, and a compact carrying case that will hold both the viscometer and the spindle holder when not in use.

Determinations are secured directly in centipoises by merely inserting the instrument's spindle in the material to be measured, flicking on a switch, and reading the dial. The whole operation, including cleaning up, usually takes only a minute or two.

HOLLAND
automatic-pneumatic.
SPRAYING MACHINE



- PORTABLE
- DRIVEN SOLELY BY AIR PRESSURE

Production up to 1000 pieces per hour

Uses regular exhaust booth

Only one operator is needed to load unfinished and remove finished work.

Write for FREE folder "S"

J. HOLLAND & SONS, INC.
MANUFACTURERS · DEALERS
276 SOUTH NINTH ST · BROOKLYN N Y

"*Wood Graining*" ADDS *Eye Appeal*

American Graining Plates are photographic reproductions of fine woods.

AMERICAN RICHWOOD PRODUCTS CO.
Graining Plate Division
104 E. Mason St., Milwaukee 2, Wis.

BOOKS
On Finishing Available

"MODERN ORGANIC FINISHES—Their Application to Industrial Products" (452 pages) new $8.50

"CHEMICAL FORMULARY" (Vol. IX) 7.00

"FINISHING METAL PRODUCTS"—2nd edition (352 pages) 5.50

"PRACTICAL FURNITURE FINISHING" (112 pages) 1.50

"FURNITURE FINISHING" (543 pages) 4.00

"SPRAY PAINTING"—Industrial and Commercial (169 pages) 2.00

"THE MIXING OF COLORS AND PAINTS" (292 pages) 2.50

"WOOD FINISHING" (361 pages) 2.50

"NATIONAL PAINT DICTIONARY" (704 pages) 7.50

"MODERN POLISHES AND SPECIALTIES" (313 pages) 7.50

"PRACTICAL COLOR SIMPLIFIED" (128 pages) 5.00

"GRAINING"—Ancient and Modern (224 pages) 4.00

"THE SILK SCREEN PRINTING PROCESS" (225 pages) 4.50

"SCREEN PROCESS METHODS OF REPRODUCTION" (252 pages) 3.00

"THE SCIENCE OF WRINKLE FINISHING" (204 pages) 5.00

"THE SCIENCE OF MODERN WOOD FINISHING" (386 pages) 6.00

"PAINT & VARNISH TECHNOLOGY" (509 pages) 8.00

"METALLIC AND NON-METALLIC COATINGS FOR GRAY IRON" (76 pages) 1.75

"PAINT FILM DEFECTS — Their Causes and Cure" (544 pages) 12.00

"INDUSTRIAL SOLVENTS" (764 pages) 12.00

"FINISHING MATERIALS AND METHODS" (320 pages) 4.00

Cash Must Accompany Order—
Send for Descriptive Circular

INDUSTRIAL FINISHING
1142 N. Meridian St. Indianapolis 4, Ind.

Dolan's Tintone Wood Filler

V. J. Dolan & Co., 1830 N. Laramie Ave., Chicago 39, Ill., manufacturer of industrial finishes, announces its newest development in a wood filler, under the name of "Tintone."

It is claimed that Tintone Fillers produce clear, clean colors and eliminate greying, spotting and hazing. They also provide improved pore filling and reduced pin holing, puffing, shrinking, etc. Available in light, medium and dark colors for either mahogany or walnut.

Tests Clear Varnish Coverage by Ultra Violet Lamp

The American Microphone Co., of Pasadena, California, has solved a problem which has plagued many a manufacturer of military equipment designed for use in the tropics.

American Microphone Co. makes the transmitter elements for military telephone hand sets. These sets are tropicalized by coating with a transparent, fungicidal varnish. However, in inspecting parts under ordinary light, it was impossible to detect gaps in the varnish coating.

A clear fungicidal coating must completely cover surfaces for protection in the tropics.

BARRETT "FILWHIRL" ENAMELERS make easy work of many difficult coating problems

The Barrett Centrifugal Enameler

The Barrett "Filwhirl" Centrifugal Enameler provides a sure, clean and economical method of applying enamel or lacquer to parts or products that can be rotated. It saves coating material, time and expense. It is designed for bulk handling, and speedy production requirements.

It has proven highly successful in coating helical springs, clips, clasps, zipper parts, bead and link chain, toys, automobile and luggage hardware, misc. metal stampings, castings, etc. Good results are obtained with japan, lacquers, varnishes, paints, waxes. No drips or fatty edges.

Furnished in spindle post, fixed bowl, and carrier types, in several capacities. Safety features included and auxiliary equipment is available.

Send a few representative samples to be processed and submitted for your examination.

THE LEON J. BARRETT COMPANY
Designers and Builders of Centrifugal Machinery
1703 GRAFTON ROAD WORCESTER 1, MASS.

Working in conjunction with Ultra-Violet Products, Inc., of South Pasadena, California, American Microphone has developed a technique that eliminated any chance of incomplete tropicalization! The fungicidal varnish has a fluorescent additive, and Blak-Ray ultra-violet lamps have been installed at the coating and inspection stations. Under Blak-Ray, the coating fluoresces brilliantly, and any gaps in application are immediately visible.

According to American Microphone, rejects due to improper tropicalization have dropped to zero since the installation of Ultra-Violet Products' Blak-Ray lamps.

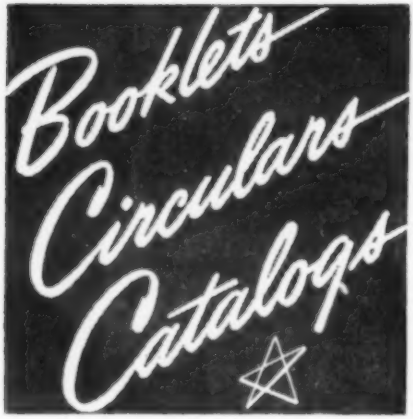
Hot Plastic Dip

For heating the coating material used in hot plastic dip coating of metal products for protection during shipment and storage, Rohne Electric Mfg. Co., Inc., 20 E. Hennepin Ave., Minneapolis 1, Minn., has developed electric melting and mixing tanks in different sizes. A free bulletin illustrates and describes the products.

Traffic Line Paint Striper

The Line Marker Divn. of Universal Yonkers Corp., 137 Alexander St., Yonkers 2, N.Y., has developed the Universal controlled flow traffic line paint striper which lays a single or double line. Paint is received from the gravity line; a distribution apron feeds it evenly to finger rollers which spread the paint on any reasonably smooth surface such as macadam, concrete, asphalt or wood.

The operation is offset to give the operator a clear view of the line—and he doesn't have to straddle it.



Continuous Blast Cleaning

"Continuous Airless Blast Cleaning" is the subject of a new bulletin published by American Wheelabrator & Equipment Corp., 1144 S. Byrkit St., Mishawaka, Indiana. The bulletin explains the process of continuous blasting and illustrates how it is being applied in actual practice.

Catalog of Synthetic Waxes

Synthetic waxes of a wide range of physical properties are fully described in the new catalog "Synthetic Waxes by Glyco".

Copies of this 16-page catalog are available, free of charge, on request from Glyco Products Co., Inc., 26 Court St., Brooklyn 2, N. Y.

Painting and Protecting Aluminum—Free

A new and colorful illustrated 4-page bulletin reveals practical information about the value of alodizing aluminum to bond paint coatings and give lasting protection to the metal. A free copy can be obtained from American Chemical Paint Co., Ambler, Penna.

Despatch's 50th Anniversary; Golden Brochure

A beautiful illustrated brochure of 16 pages 8½x11-in., printed in gold, red and black, on high quality paper, gives some historical highlights in the 50 years of progress of Despatch Oven Co., Minneapolis, Minn. Illustrations show early buildings occupied by the concern, views inside the present establishment, many of the company's products, portraits of its executives and department heads. The firm's present products include industrial ovens, furnaces, heaters, fans and complete conveyorized finishing systems.

New Temperature Controls

The Burling Instrument Co. of South Orange, N. J., announces the publication of a new 12-page illustrated catalog, G-17, which describes its full line of temperature controls.

Special features of this catalog are the additions of four new instruments and inclusion of tables of application and performance for all instruments.

Flexible Ducting Bulletin

The American Ventilating Hose Co. offers a new bulletin No. 34 which describes several uses and advantages to be gained in manufacturing operations of all kinds by the installation of strong, light weight, flexible ducting. The application of Flexaust as a component of many kinds of equipment is also shown. The company's address is 100 Park Ave., New York 17.

Twisted Wire Brushes

A new 4-page illustrated bulletin lists 56 standard precision made spiral or twisted wire brushes, for cleaning holes, tubes, etc. The smallest brush is ⅛-in. in diameter in a twisted wire handle 4-in. long with a circular loop at one end. A copy of the bulletin can be obtained free from Mill-Rose Co., 1985 E. 59th St., Cleveland 3, Ohio.

Materials Handling Course

A new text on Materials Handling, prepared especially for home study, has been added to the International Correspondence Schools courses in Industrial Engineering, Factory Layout and Industrial Supervision. Written by Harry E. Stocker, materials handling consultant, the new text covers equipment and methods used to handle material in production plants and in warehousing and storing.

Klem's "Strip Aid" Cleans Conveyor Hooks, Rejects

Klem Chemicals, Inc., 14401 Lawson, Dearborn, Mich., has produced a new 4-page folder (8½x11-in.) which describes "Strip Aid," and the advantages it offers industry in speeding up the removal of

For BLONDE *Finishes*
use
Bleached QUALASOLE

AMERICA'S FINEST PADDING LACQUER
WILL NOT DARKEN BLEACHED WOODS
WILL NOT DARKEN WITH AGE

ORDER
A TRIAL GALLON
TODAY!

Use standard Qualasole for conventional dark finishes.

QUALATONE PRODUCTS INCORPORATED
21 GAY STREET, NEW YORK 14, N. Y.

West Coast Distributor: H. Behlen & Bro., Inc., 1755 Berkeley St., Santa Monica, Calif.

Form-A-Roc · *FIRST COAT*

FOUNDATION FOR FINE FINISH

1. Dries with lacquer speed.
2. Has double lacquer solids at spray gun.
3. Fills very well—sands easily.
4. Adheres tenaciously to steel, wood, presdwood, aluminum, galvanized metal, etc.
5. Holds out lacquer, synthetic or oleoresinous enamels exceptionally well.
6. Thins 3:1 with xylol.
7. Available in GREY, SALMON and OFF-WHITE
8. Ground well to smooth texture.

MADE BY

THE VARNISH PRODUCTS COMPANY

5206 Harvard Avenue Cleveland, Ohio

paints, enamels, lacquers, etc., from conveyor hooks, equipment and from rejected parts. Illustrations show how the product is used in factories.

Other Klem Kleaners—eight of them—are also listed and briefly described.

The company's engineers will recommend solutions to production cleaning problems, involving pickling, alkaline cleaning, rust removal and rust prevention. Service is furnished on request and without charge.

Pangborn Offers Bulletin on Control of Industrial Dust

The Pangborn Corporation, Hagerstown, Maryland, offers a 28-page, two-color bulletin entitled "The Control of Industrial Dust." Purpose of the book is to describe Pangborn Dust Control and its many applications. Case histories of users of Pangborn equipment are documented with photographs and performance data indicating savings achieved through the installation of dust control equipment.

Industrial Lighting Specs.

Publication of a completely-revised edition of the RLM Standard Specification book has just been announced by the RLM Standards Institute, 326 W. Madison St., Chicago 6, Ill. The most recent additions and revisions featured in this edition, recommended by the RLM Technical Committee and officially ratified by the RLM membership, cover: 1) Two officially-approved new specifications. 2) Important revisions and clarifications of existing specifications. 3) New tables of typical coefficients of utilization and light distribution curves.

Storage Racks for Drums

Bulletin 5221, just released, presents Barrett Steel Storage Racks for drums, barrels, crates, bins, skids and pallets. All these applications are illustrated with installation views.

The need in many establishments for more floor space clashes with the discouraging cost of new buildings. This bulletin demonstrates how storage rack system solve this dilemma in an economical and satisfactory manner.

Racks pictured multiply the storage capacity of floor space several times by storing materials and goods right up to the ceiling; gaining large areas of valuable floor space for profitable production operations.

Storage Rack Bulletin 5221 will be mailed upon request by Barrett-Cravens Co., 4609 S. Western Blvd., Chicago 9.

Military Lacquers

A handy guide to specification lacquers for finishing military items is available from Hercules Powder Co., Wilmington 99, Dela.

The first section of the leaflet enables suppliers of finishes to find out what kind of lacquer finishing material is being called for when all they have is a specification number.

In the second section of the leaflet (10 pages 3¾x8-in.) the permissible or appropriate specification numbers are grouped according to use. In this section specification numbers for finishing such items as vehicles, aircraft, ammunition and components, furniture and containers are included.

Simplified Cleaning Explained in New Kelite Brochure

"Scientific Cleaning for Modern Metal Finishing" is the title of an illustrated 2-color brochure just published by Kelite Products, Inc., national manufacturer of chemicals for cleaning and processing.

The brochure explains how virtually all cleaning and processing jobs are streamlined through the application of compounds utilizing the principle of Kelite pH Control. Included in the brochure is information, for example, on high-speed (one to two minutes) phosphatizing; removal of heat treat scale by simple immersion in an odorless, non-flammable, non-phenolic liquid; information on the removal of carbon, grease, dyes or gums from aluminum, magnesium, cadmium, copper, zinc, diecast and ferrous metals by soaking in room temperature solutions. Each of the cleaning or processing techniques described can be achieved through the use of recommended compounds.

The literature discusses 23 other difficult cleaning or processing jobs with applications in most phases of the metal finishing and metal working industries.

For a free copy, write to Kelite Products Co., Inc., 1250 N. Main St., Los Angeles 12. Specify Bulletin 121.

Cleaning, Finishing Mach'ry Co. Appoints Southern Man

Appointment of a new representative covering southern states is announced by Cincinnati Cleaning & Finishing Machinery Co., Ironton, Ohio. C. E. Holmes, 831 N. 20th St., Birmingham, Alabama, will represent the company in Alabama, Tennessee, Georgia, Louisiana and Mississippi. He comes to Cincinnati with a background of more than 15 years in metal cleaning and finishing.

Holmes will maintain his office at his present Birmingham location. As Concinnati's representative, he will handle their complete line of metal cleaning machines and finishing systems.

SEND US YOUR MARKING PROBLEMS!

You can save production time and marking costs by using the Glidden Screen Process system for identification on an endless number of products. Send us your problems. We'll answer them promptly without obligation.

THE GLIDDEN COMPANY

Graphic Arts and Sign Finishes Division

11001 Madison Ave., Cleveland 2, Ohio

FAST BECOMING THE LEADING NAME IN PRODUCTION FINISHES . . NEW PERIOD

- Fillers and Stains
- Lacquers—Clear and Semi-Gloss
- Sealers
- Lacquer Enamels—Flat and Gloss
- Synthetic Enamels

Write for 5 Gallon Working Sample at Drum Price

Year after year more and more products carry NEW PERIOD Finishes. And no wonder! Every step in the manufacture is checked and rechecked to assure uniformity and quality. We carry a complete stock—always ready for fast, dependable delivery.

MANUFACTURERS OF FINE WOOD AND METAL PRODUCTION FINISHES

NEW PERIOD *Production Finishes*

ESTABLISHED 1917

NEW YORK WOODFINISHERS' Supply Co. INC.

109 IMLAY STREET BROOKLYN, N.Y.

Industrial FINISHING Editorial

Identify Your Firm, Its Products and Services

Let's not take too much for granted and assume that everyone in the industries we strive to serve recognizes our company name, knows our complete address and telephone number, and remembers our full line of products. People need to be informed and reminded repeatedly. In positions of responsibility and influence in industry, new names and faces are appearing every day. Often these changes in personnel or organization upset old established contacts and interrupt profitable business relationships.

New people, who have taken the place of former friendly contacts, naturally have typical human characteristics, but in varying combinations, for example, sensitiveness, stubbornness, short tempers, trends toward stingeness or extravagance, desire for change, alergies, urge to make a reputation, eagerness to climb socially, and various other complexes too numerous to mention.

The sooner the representative gets better acquainted with all new contacts in his territory the sooner he will learn to understand them and make headway toward gaining favorable attention for his company, its products and its services. New people have to be contacted, they must be informed (but tactfully) and their confidence must be obtained.

The sales, service and publicity departments of every successful concern must take into consideration these continual changes that are taking place in organization personnel, as well as changes that are becoming evident in current demands—and improvements that are occurring in new equipment, materials and supplies.

To mention just one essential detail that comes to mind: Let's include our full name, address and telephone number on all of our advertising and publicity literature. Important inquiries and profitable business have been lost for no other reason than that some impatient executive could not contact the firm by air mail, wire or telephone at the moment an urge hit him.

In conclusion, let's also include, where and when possible, some mention or listing of our complete line of products and services.

"Too little and too late" can result in the sales department occasionally receiving, instead of a profitable order, this remark from a potential buyer: "I didn't know you could supply that; sorry; we have bought elsewhere."

Competitive Products Offer Challenge

The shortage of consumer goods, as predicted a year and a half or two years ago, has failed to materialize. In fact, upon good authority, it is estimated that consumer goods will be fairly plentiful in the next few years ahead, unless a major war occurs. So instead of a lot of customers scampering around to put their names on waiting lists, and trying "influence" to obtain goods, it looks like more manufacturers' salesmen will be hunt-

"LIQUID ENVELOPE"

PEELABLE SPRAY-BOOTH COATING

THE FIRE-SAFE—LABOR-SAVING METHOD THAT ELIMINATES HEAVY OVER-TIME FOR SCRAPE DOWNS

You'll never know how simple and easy . . . and inexpensive . . . it is to peel-off all accumulated overspray until you use "LIQUID ENVELOPE", the original and still the most satisfactory "strip coating". Why not order a 5 gallon can at the drum-lot price today?

BETTER FINISHES & COATINGS, INC.

268 Doremus Ave., Newark 5, N. J. • 122 East 7th St., Los Angeles 14, Calif.

DISTRIBUTED BY

Aviation Lubricants Co., San Diego, Calif.
General Spray Equipment Co., Boston, Mass.
Bay State Spray Equipment Co., Springfield, Mass.
Lea Manufacturing Co., Waterbury, Conn.
Edgcomb Steel of New England, Milford, Conn.
Kellermann Paint Co., New York, N.Y.
Grapek Paint Co., Newark, N.J.
H. J. Gettemuller Co., Inc., Baltimore, Md.
R. W. Renton Co., Cleveland, Ohio, Indianapolis, Ind.
Supplee-Biddle-Steltz Company, Philadelphia, Pa.
Dean & Barry Co., Columbus, Ohio
Vic Miner Co., Toledo, Ohio
Abrasive & Supply Co., Detroit, Mich.
Nelson Industrial Supply Corp., Grand Rapids, Mich.
O'Donohue Sales Co., Milwaukee, Wis.
Paints & Lacquers, Inc., Chicago, Ill.
Tanner & Co., Indianapolis, Ind.
Metal Goods Corp., St. Louis & North Kansas City, Mo., Dallas & Houston, Texas, Denver, Colo., New Orleans, La., Tulsa, Okla.
Hubbard & Stau, Los Angeles, Calif.
The Plastic Paper Co., Los Angeles, Calif.
C & H Supply Co., Seattle, Wash.
Hugh Russel & Sons, Ltd., Montreal & Toronto, Canada

How to improve

METAL PRODUCTS

through better finishes

Here is a book that answers all the questions on finishing metal products and shows the methods, techniques, and cost factors in producing them.

Just Published

FINISHING METAL PRODUCTS

New Second Edition **describes all recent developments in this field.**

By HERBERT R. SIMONDS and ADOLPH BREGMAN, Consulting Engineers. 352 *pages*, 5x8, 135 *illustrations*, $5.50.

A COMPLETE PRACTICAL MANUAL covering usual types of finishing—galvanizing, polishing, plating, lacquering, painting. Also discusses fully such subjects as use of color and production and use of prefinished materials.

COVERS FINISHING from a business and sales standpoint. Deals with methods that improve results and reduce costs. Helps you determine types of finish with greatest sales appeal.

EXPLAINS SHOP TECHNIQUES. Tells how to reduce polishing and buffing costs. Gives techniques for cadmium plating, chromium plating, spray coating. Tells how to use enamels and lacquers in metal parts production.

This up-to-date, handy manual should be at the finger-tips of plant managers, superintendents and foremen. Send your remittance today to

INDUSTRIAL FINISHING

1142 N. Meridian St. Indianapolis 4, Ind.

ing customers and trying to induce people to buy their products.

The wise manufacturer will do something about this. First, he will look at his product critically and speculate on how it can be improved in utility, design and appearance; how the cost of manufacture can be reduced and quality either maintained or improved. He will plan to increase and improve advertising, revise merchandising plans, streamline and build up an aggressive sales force. To paraphrase a popular song, "Competition is coming, there'll be scrambling a-plenty."

A Fire Prevention Plan That Works

★ Fire is an ever present threat in the paint room or finishing room. Due to the very nature of the work and the materials involved, its consequences can be serious indeed. Fortunate is the foreman of a plant which is so well managed and protected that the possibility of a finishing room fire gives him little or no concern.

While a few shops do have a high degree of protection, they are certainly in the minority. The majority range from those having a few recognized or unrecognized fire hazards, to those wherein the conditions practically invite a major conflagration.

Sometimes it requires an actual experience with a blaze to make a paint shop crew fire conscious. How often has a foreman, home for the evening,

---

★ *Guest Editorial . . . Many readers can write an excellent editorial—two or three paragraphs that present a timely suggestion or valuable idea which will stimulate thought on a live subject. The Editor welcomes guest editorials and pays for those used.*

SAVE TIME MANPOWER with CIRCO VAPOR DEGREASERS

You can save dollars on your cleaning operations by installing CIRCO Vapor Degreaser in your production line. With its use metal parts cleaning is speeded up and made more efficient. Grease, oil and dirt are quickly and effectively removed from the parts by the vapors of the solvent. Chips, insoluble impurities, buffing compounds and stubborn dirt are completely removed with clean solvent flushing. Maintenance and operation costs are at a minimum. Solvent is distilled and reclaimed automatically.

WRITE FOR — *complete catalog*
Use PER-SOLV or CIRCO-SOLV
for all Vapor Degreasing requirements

CIRCO VAPOR DEGREASERS available in all types, vapor, vapor-immersion, vapor-spray and combinations. All sizes from small batch-type degreasers to custom-built monorail or cross-rod conveyor models.

1666

TOPPER EQUIPMENT COMPANY
MATAWAN, NEW JERSEY • OFFICES IN PRINCIPAL CITIES
MANUFACTURERS OF VAPOR DEGREASERS AND METAL PARTS CLEANING EQUIPMENT

begun to worry about whether the ovens were turned off, or the fires under the stripping tank or degreaser, or perhaps whether the spray booth scrapings were left inside the plant? Often he simply cannot relax until he has returned to the plant to reassure himself that all is well.

With a crew that has worked together for a long time, these worries can usually be minimized. Certain fire hazards are recognized as such, and reasonable precautions are taken by all concerned. Each man realizes that his job and the jobs of all others in the plant are at stake, and each one can assume a certain responsibility for mutual protection. Each worker can be assigned the job of checking the safety of some piece of equipment for the night, while one or two others will be delegated to recheck the entire shop for double security. With such a system there need be little cause for worry

Unfortunately, in these days of stress the labor turnover is high. In the face of this rapid turnover, it is hard to keep more than a nucleus of trained men together. The situation is further complicated by the tendency of everyone to become more careless under pressure. Tired men become indifferent to open containers and flammable rags.

In spite of this, a fire can be doubly tragic in these times. It is tragic not only to the owners and employees, but also to the nation which needs every unit of production. However, even today, these risks can be minimized.

The first step is to call all of the experienced men together for an honest stock taking of fire risks. Ask them to list every possible source of a fire, as well as any type of care-

lessness that might contribute to an outbreak. Then a procedure should be outlined for minimizing these risks, and a system planned for fighting any fire that might occur. A certain amount of time should be allowed for security examinations at the end of the day.

The most important features in such a program concerns new workers, for these people have neither an established sense of responsibility nor a familiarity with the hazards. As soon as their employment is established, each one should be taken in hand by an older employee, taken around the premises, and acquainted with the various hazards and possible weak spots in the fire protection system. Each one should be assigned as sort of understudy to one of the older employees in his fire protection duties, to take over in case of older worker's absence. This action will instill, in each new worker, a sense of responsibility and a feeling of belonging. Often he will be more zealous than an older employee.

I know of one plant that had four spray-room fires in three years. In desperation they devised the system just described. They have not had a fire in three years since. There is no reason why it cannot be successful elsewhere too.—*Geo. A. Conrad.*

1952 Catalog of
Paint Testing Apparatus
NOW AVAILABLE.
Write for your copy.
GARDNER LABORATORY
Bethesda 14, Maryland

SOLVENTS RECOVERED BY
THE LOFGREN PROCESS
We RECOVER YOUR
SOLVENTS & THINNERS
From Wash Thinners - Spoilt Lacquers - Degreasing Machine Sludge, etc.
Each customer's shipment, whether one drum or a carload, receives PROPER AND SEPARATE TREATMENT. Write to:
SOLVENTS RECOVERY SERVICE, INC.
101 Central Ave., Westfield, N. J.
OR
HAMMOND SOLVENTS RECOVERY SERVICE
241 Brunswick St., Hammond, Ind.

Using the Handicapped As Workers

★ One employer using handicapped workers in his business has said, in newspaper publicity concerning such persons, "They are encouraged to use their initiative and to develop such work methods as may best suit them."

During the next two years it may be that few of the finishing plants or departments will be able to operate at capacity without using some handicapped employees. In such cases please remember that some routines for fully normal men may have to be altered to fit the individual needs of those who have various handicaps.

Encouraging initiative in figuring out the most effective work habits for each worker, under the guidance and supervision of the finishing department foreman or other representative of management, can be a great help in meeting tomorrow's quotas.—*G.M.D.*

Identity of Pipe Lines

HOW many people in your organization, with or without authority to act, are thoroughly acquainted with the various service or utility lines in your plant? By service lines I mean steam, air, paint, water, sprin-

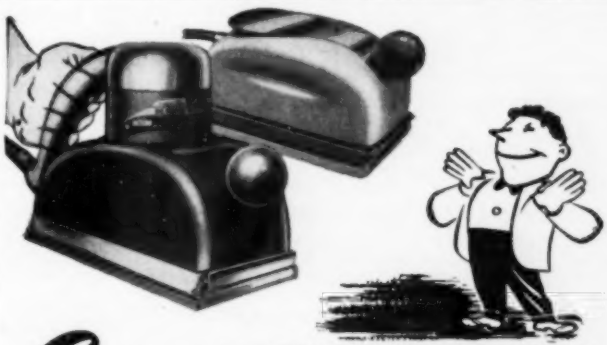
kler (both wet and dry), and electric conduits carrying 110, 220 or 440-volt lines.

Several framed blueprints behind glass, strategically placed around the plant, are a help. The blueprints should show all of the various lines from origin to the most remote point of use, and each line should be plainly marked, preferably in color, to indicate what it carries.

Blueprints alone are not sufficient, especially in an emergency. Some firms have adopted a set of different colors to identify various pipe lines and conduits. For instance, steam lines are painted white; air lines, yellow; paint lines, red; water lines, green; and electric conduits, blue. All prints contain the established legend of colors. Voltage of the electric current is stenciled on the conduit just above each outlet.

Other concerns use printed pressure - sensitive tabs which are placed around the various pipes at intervals. These tabs are marked to show the voltage carried in respective conduits. While this system is effective for identifying the various service lines, and is economical to install, it is not as quickly discernable as the colored piping system.

The identity of service lines should not be kept secret. The more they are publicized, and the easier and quicker they may be identified, the better for all concerned, especially in an emergency. This ease of identification of pipe lines is also a great aid to maintenance and repair workers.



Easy The ONLY RECIPROCATING SANDER Powered with an ELECTRIC MOTOR

Now TWO full-size—positive drive—genuine reciprocating, ⟨STRATE-LINE⟩ action sanders—Electric and Pneumatic (air) Powered DETROIT EASY FINISHERS

STRATE-LINE reciprocating action works up to right angles —no abrasive scratches, no hand clean-up—*does the complete job!*

POSITIVE DRIVE—plus rugged, powerful air and electric motors—insures power for the really tough jobs. *Try to stop an Easy!*

WET SANDING with Model AF's *new* No-Surge mist type automatically controlled water applicator for wet work maximum efficiency *and operator comfort.*

FULL SIZE—single pad, proven most convenient—uses ⅓ standard abrasive sheet, 3⅔" x 9". Convince yourself—try an Easy! Write for bulletins describing Model DF (electric) and Model AF (air).

DSM DETROIT SURFACING MACHINE COMPANY
1268 E. EIGHT MILE RD., DETROIT 20, MICH.

J. A. Sanches Is Made Bede's N. Y. Dist. Sales Mgr.

Bede Industrial Products, Inc., 1110 Brookpark Road, Cleveland 9, Ohio, announces the appointment of Mr. Joseph A. Sanches as New York area District Sales Manager. A new office has been opened at 475 Fifth Ave., New York.

Mr. Sanches has had many years of practical experience as department manager for several large companies in the finishing field. He has been a consultant and also is the author of many technical articles on finishing problems.

Bede now offers a complete line of single and multiple Paint Spray Heaters for industrial finishing, as well as its new Model R Heater for automotive refinishing.

TOMORROW'S Products Tested TODAY

A service to aid industry in producing longer-lasting and better-looking products. Quick predetermination of durability and permanency by actual exposure test in South Florida. Write us today for full information.

SOUTH FLORIDA TEST SERVICE
EST. 1931
4201 N. W. 7th St. Miami 34, Fla.

Faster BURNING-IN, Better Results with the WILKINSON Knife

Made of just the right steel, ground and honed for proper concentration of heat. Easy handling—perfectly balanced like an artist's brush. Write for descriptive circular and prices.

Wilkinson Equip. & Supply Corp.
6958 S. Wentworth, Chicago 21, Illinois

Random Comment on the Industrial Scene

(Continued from page 8)

original plant production, but "will be filled providing ample raw materials are available." Toy dealers place the bulk of their orders during the first quarter of the year for the coming fall season.

* * *

Plastic Reflectors. Two new "Eveready" spotlights by the National Carbon Co., Inc., now use plastic reflectors finished with vaporized aluminum to produce a better "spot" than metal reflectors. The projected light spots are brighter, uniformly round, and evenly diffused. The sturdy reflectors resist severe abuse and, being thermo-setting, maintain accuracy of contour under extreme conditions.

The reflector is molded from a special "Bakelite" phenolic compound developed for the application. Under a vacuum and high temperature, the highly reflective aluminum coating is deposited on the inside cup section, requiring none of the finishing needed on die-cast reflectors.

* * *

Foam Plastic that resembles foam rubber has been developed. This plastic does about everything expected of rubber, but it resists both flame and chemicals. It can be molded into intricate shapes, die cut to any shape, and may be sliced as thin as 1/32-in.

It is a vinyl resin subjected to about 400-lbs. pressure which swells it to from four to eight times the original size so that it has the appearance of thick whipped cream. This is run into molds which are then placed in ovens and baked at 225° to 275° F.

CLAREMONT

the Name that's quality—famous for

FLOCK

RAYON FLOCK

WOOL FLOCK

COTTON FLOCK

America's No. 1 Source of Supply, Modern Manufacturing Facilities, Careful Processing Supervision, Finest Quality Materials, Std. Lgths., 1/32" & 1/16" Other Lgths. to Specs. Rainbow Range, 18 Colors Sealed, Dust-proof Bag Shipments.

"An Ounce of Flock Creates a Pound of Allure"

Write for Samples Color Cards, Instruction Manual and Prices

CLAREMONT WASTE MANUFACTURING COMPANY

The Country's Largest Manufacturer of FLOCK

CLAREMONT NEW HAMPSHIRE

DRUM CHAINER

A compact and efficient machine for cleaning drum interiors.

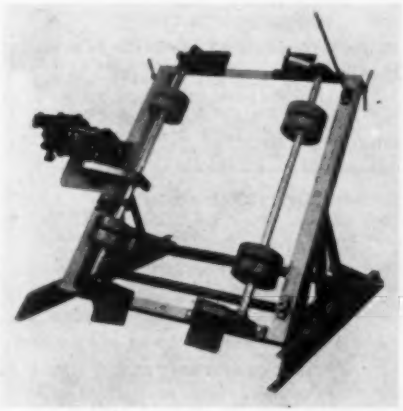
Frame tips manually either way for end cleaning.

Locks in horizontal position for side cleaning.

Rolls 55-gallon drum at 30 R.P.M. with ¼ H.P. motor.

Also made for 30 and 55-gallon drums, as well as for 55 and 110-gallon drums.

Write for literature and prices.



Unit illustrated above for 55 and 110-gallon drums with ½ H.P. motor.

THE VOL-U-METER CO., P.O. Box 54, Buffalo 16, N. Y.

Chemical Coatings Appoints Man for New York

The Chemical Coatings Corporation of Rocky Hill, Conn., announces the appointment of Stuart W. Hopkins as Sales Repsentative in Central New York State. After graduating from Amherst, Mr. Hopkins took an intensive course in the company's research and development laboratories on industrial finishes.

CLASSIFIED ADVERTISING

The rate on ads appearing in this department is $1.00 per line of 6-pt. light face type, per insertion. Minimum charge, $5.00. Ads set in 8-pt. extra bold face type cost $2.00 per line, per insertion.

CHEMIST AVAILABLE.

16 years' formulation, development and production of paint, lacquer, enamel, stains and fillers. Broad knowledge of raw materials and equipment. Can take charge of laboratory or production or carry on individual development. Address IF-889, care Industrial Finishing.

TECHNICAL SERVICE REPRESENTATIVE

Available, Graduate chemist, sixteen years' formulation, application and service on industrial finishes. Excellent knowledge of most industrial finish applications. Desires responsible position with progressive company. Address IF-890, care Industrial Finishing.

PRODUCTION EXECUTIVE

Desires permanent connection where full ability and authority may be exercised. 15 years' experience in formulation, production, sales, service, purchasing and plant management. Specialist in lacquers, stains, fillers and synthetics. Address IF-891, care Industrial Finishing.

POSITION WANTED.

Expert Foreman Finisher desires connection with reliable concern. 25 years' experience as foreman. Have knowledge both technical and practical in all finishing phases. Capable of meeting schedules with high quality finish. I harmoniously manage any number of people. Can furnish best of reference. All replies will be treated in confidence. Address IF-790, care Industrial Finishing.

FINISHING FOREMAN WANTED.

Experienced in the process of paint dipping on metal products. Additional products and expansion makes this position available with well established company on both civilian and defense products. Good wages plus steady work and company benefits. State full experience and particulars in reply. Address IF-892, care Industrial Finishing.

EXCELLENT POSITION VACANCY—LABORATORY.

Group leader for synthetic enamel and clear formulations for industrial coatings end use. Experience required. Positions for chemists and formulators are also open. Reply to J. Holle, Finishes Division, INTERCHEMICAL CORP., 1754 Dana Ave., Cincinnati 7, Ohio, giving complete qualifications including salary requirements.

WANTED.

Lacquer Chemist willing to invest some capital in going business located in North Carolina. Manufacturers of lacquers, stains and filiers for furniture trade. All replies confidential. Address IF-893, care Industrial Finishing.

REPRESENTATIVE WANTED.

Young aggressive sales representative for Minnesota territory. Middle West manufacturer of quality line industrial finishes solely offers to the right man this unusual opportunity to handle a distinctive line of products. No ceiling as to earnings. Remuneration based on drawing account against commission plus very general expense allowance. Only applicants of highest calibre will be considered. State qualifications in detail. All communications held strictly confidential. Address IF-896, care Industrial Finishing.

SALESMEN WANTED.

An old established AAA1 Middle West Paint Manufacturer is enlarging its Industrial Finishes Division sales force and is seeking the services of young aggressive men for permanent positions. These men must have experience in Product Finish sales, be well appearing and must know and live in the territory in which they will work. Territories open are Northern Indiana — Southern Michigan; Central Illinois — St. Louis; Southern states around Georgia; Kansas—Colorado; and Iowa—Nebraska. If you are interested in a good future, write giving full particulars regarding yourself and your experience. All replies will be held in strict confidence and our salesmen know of this advertisement. Address IF-898, care Industrial Finishing.

SALESMAN WANTED TO HANDLE FLOCK.

Large well rated manufacturer of all grades of flock wants salesman to represent them in selling flock to the New England Textile trade. Salesman with already established line of Textiles or Adhesives for the cloth coating trade preferred. CELLUSUEDE PRODUCTS, INC., Rockford, Illinois.

MANUFACTURER'S REPRESENTATIVE

For Arrowhead Adhesives, Duratite Wood Dough and Surfacers. Some states are still available on an exclusive basis. Prefer men with non-competitive lines calling on industrial accounts and dealers. Products can be handled on a commission or distributor basis. More information on request. WEBB PRODUCTS CO., P. O. Box 520, San Bernardino, Calif., or Box 64, Norcross, Georgia.

SPRAYING EQUIPMENT REPRESENTATIVE WANTED.

Nationally known manufacturer of spraying equipment is looking for representatives in the following areas: New York, Pittsburgh, Memphis, Des Moines, and the Carolinas. Men with distributor connections preferred, but knowledge of market, enthusiasm and natural liking for sales work will count greatly. Fine opportunity for right men with one of the country's best sales organizations. Address IF-894, care Industrial Finishing.

INDUSTRIAL FINISH MATERIALS.

Are you successfully selling those materials? Are your earnings as good as you want them? Are you waiting for someone to die or quit, to secure advancement?

Are you restricted in your sales effort because of limitations of materials made by your company—or by competitive prices, etc.?

If you have imagination, INITIATIVE, resourcefulness, and the ability to produce, an opportunity to head our Industrial Finishes Division is possible. Full line, quality, competitive, lab. and field service. Long established company. Your reply held in strict confidence. Address IF-895, care Industrial Finishing.

FORD CUPS

THE VOL-U-METER COMPANY

Buffalo 16, New York

FOR SALE.

Paint factory, Camden, N. J. Est. business, fully stocked with raw materials, machinery, etc., to produce lacquers, enamels, etc. Owner retiring owing to health. Total value, approx. $50,000. Terms if desired. Address IF-888, care Industrial Finishing.

FOR SALE.

Various paste colors in drums for lacquer and enamels. Approx. 5,000 gals. Also O.D. and blue gray finished lacquers, 7,000 gals., price $1.00 per gallon. Some equipment available. SAHLIN COLOR CO., 1417 Sheridan St., Camden, N. J.

DOPE FOR SALE.

Cellulose Acetate Butyrate Dope. 2,600 gallons packed in 5-gallon cans, individually boxed. All intermediate blue, non-specular, manufactured recently by the Glidden Co. Address IF-887, care Industrial Finishing.

WANTED TO BUY.

Will buy your dirty Thinners and Solvents. Send samples or letters giving approximate contents and solids. Address THE JOHANN CO., 8547 S. Ashland Ave., Chicago, Ill.

SOLVENT CLEANING SERVICE.

Dirty lacquer solvent can be shipped to us for distillation and returned to you clean and ready for use. Within 200 mile radius of Louisville a substantial economy can be realized. Cost runs from 14c to 19c per gallon. KENTUCKY COLOR & CHEMICAL CO., 600 N. 34th St., Louisville 12, Ky.

FOR SALE.

Cardox Transitank, CO^2 750-lb. unit, model 759T. In perfect running condition. BARKER CHEMICAL CO., 700 E. 138th St., Chicago 27, Ill.

FOR SALE.

One spray booth 10′x6′x7′ high; two spray booths 12′x5′x7′ high; one top tray washing tank 10′x3′6″x4′ high; three pressure feed tanks; three spray guns; 24—72″x30″x60″ angle iron frame paint drying trucks; 816—36″x32″ wire mesh trays for above trucks. No reasonable offer will be rejected for all or part of above equipment. For detailed description, address IF-897, care Industrial Finishing.

INDEX to Advertisers

Advance Paint Co. ..... Third Cover
Allied Finishing Specialties Co. 113
American Richwood Products Co. 119
Atlas Powder Co. 81

Barrett Co., Leon 121
Barrett Varnish Co. 97
Baughn Chemical Products Co. 114
Bede Products, Inc. 1
Behr-Manning Corp. 83
Better Finishes & Coatings, Inc. 127
Blakeslee & Co., G. S. 38

Capitol Machine Co., The 37
Carborundum Co., The 10-11
Carl-Mayer Corp., The 32
Chadeloid Corporation 93
Cincinnati Cleaning & Finishing Machinery Co., Inc. 28
Claremont Waste Mfg. Co. 133
Classified Advertising 134
Coast Paint & Lacquer Co., Inc. 47

Day & Co., James B. 111
DeBurgh Conveyors 94
Despatch Oven Co. 21
Detro Mfg. & Sales Co., Inc. 116
Detroit Surfacing Machine Co. 131
DeVilbiss Co., The 78-79
Dolan & Co., Inc., V. J. 5
DuBois Co., The 6
Du Pont de Nemours & Co., E. I. 68-69
Duralac Chemical Corp. 7

Egyptian Lacquer Mfg. Co., The 59

Fostoria Pressed Steel Corp. 54-55

Gardner Laboratory 130
Gasway Corp. 20
Glidden Co., The 19-125
Grand Rapids Varnish Corp. 2

Hammond Solvents Recovery Service 130
Hercules Powder Co. 65
Holland & Sons., Inc., J. 119
Hygrade Food Products Corp. 112

Industrial Chemical Products Co. 41
Industrial Finishing Exposition 87
Interchemical Corp. ..... Second Cover

Kirk & Blum Mfg. Co. ..... Back Cover
Koch & Sons, Inc., George 75

Lanly Co., The 14
Lawrence-McFadden Co. 91
Lilly Varnish Co. ..... Front Cover
Lowe Brothers Co., The 44-45

M. & E. Mfg. Co. 32
Mearl Corporation, The 63
Metals Disintegrating Co., Inc. 33
Michigan Oven Co. 117

National Air Sander, Inc. 105
National Lacquer & Paint Co. 80
Neilson Chemical Co. 29
New York Woodfinishers Supply Co. 125
Nikolas & Co., Inc., G. J. 15

Oakite Products, Inc. 27

Paasche Airbrush Co. 109
Panco 107
Perfection Paint & Color Co. 99
Pittsburgh Plate Glass Co. 22-23
Potter Paint Co. 8

Qualatone Products, Inc. 123

Randolph Products Co. 103
Ransburg Electro-Coating Corp. 13
Reliance Varnish Co. 73
Rinshed-Mason Co. 67
Rockford Varnish Co. 95

Schaefer Varnish Co. 89
Schmieg Industries, Inc. 9
Shell Chemical Corp. 71
Sherwin-Williams Co., The 16-17
Snyder Bros. Co. 84
Solvents & Chemicals Group 34-35
Solvents Recovery Service, Inc. 130
South Florida Test Service 132
Specialty Coatings, Inc. 101
Spe-de-way Products Co. 116
Sprayon Products, Inc. 53
Spruance Co., The Gilbert 77
Stille-Young Corp., The 115
Sundstrand Machine Tool Co. 61

Torit Mfg. Co. 18
Thompson & Co. 101
Topper Equipment Co. 129
Tousey Varnish Co. 12

United Lacquer Mfg. Corp. 49
U. S. Paint, Lacquer & Chemical Co. 51

Varnish Products Co. 123
Vol-U-Meter Co. 133-135

Western Solvents & Chemicals Co. 35
Wilkinson Equipment & Supply Corp. 118-132

Young & Bertke Co. 43

Trial by Flood!

THIS PORCENITE-finished Sturgis Steel office chair was under water for a week covered with corrosive filth of the Kansas City flood.

Right: After the chair was washed and upholstery replaced, it was just like new – the PORCENITE finish was undamaged.

A WEEK IN CORROSIVE MUCK—but no rust, no paint lifting, no paint damage on these Sturgis Steel Chairs finished with Advance PORCENITE (baking enamel) and treated first with BONDERITE (a product of Parker Rust Proof Co.).

PORCENITE is a "porcelain-like" one coat baking finish which can be easily formulated to meet your own baking schedule. The price range of PORCENITE affords an economical finish adaptable to any specified use.

BONDERITE used under paint on bare metal, retards rust and corrosion and helps to anchor paint to prevent peeling. For further information on BONDERITE write to Parker Rust Proof Co., 2175 E. Milwaukee Ave., Detroit 11, Mich.

Advance PAINT COMPANY

MANUFACTURERS OF INDUSTRIAL FINISHES

Compact... Efficient... Automatically Controlled

GAS, STEAM OR ELECTRIC OVENS BY

KIRK AND BLUM

Your oven needs . . . large or small, batch or continuous production, for drying, baking or dehydrating . . . can be filled by KIRK & BLUM.

The small ovens illustrated are shipped completely assembled, thoroughly tested and ready to operate. Installation is a one-two process: Spot in place . . . make connections . . . and you're ready for production.

Write for booklet, "Industrial Ovens," showing typical installations.

Electric laboratory type oven used by noted resistor manufacturer in making TV set components. Uniform drying heat is provided by recirculation of air provided by blower and heaters enclosed in base.

THE KIRK & BLUM MANUFACTURING CO.

3131 Forrer Street
Cincinnati 9, Ohio